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BEE JOURNAL

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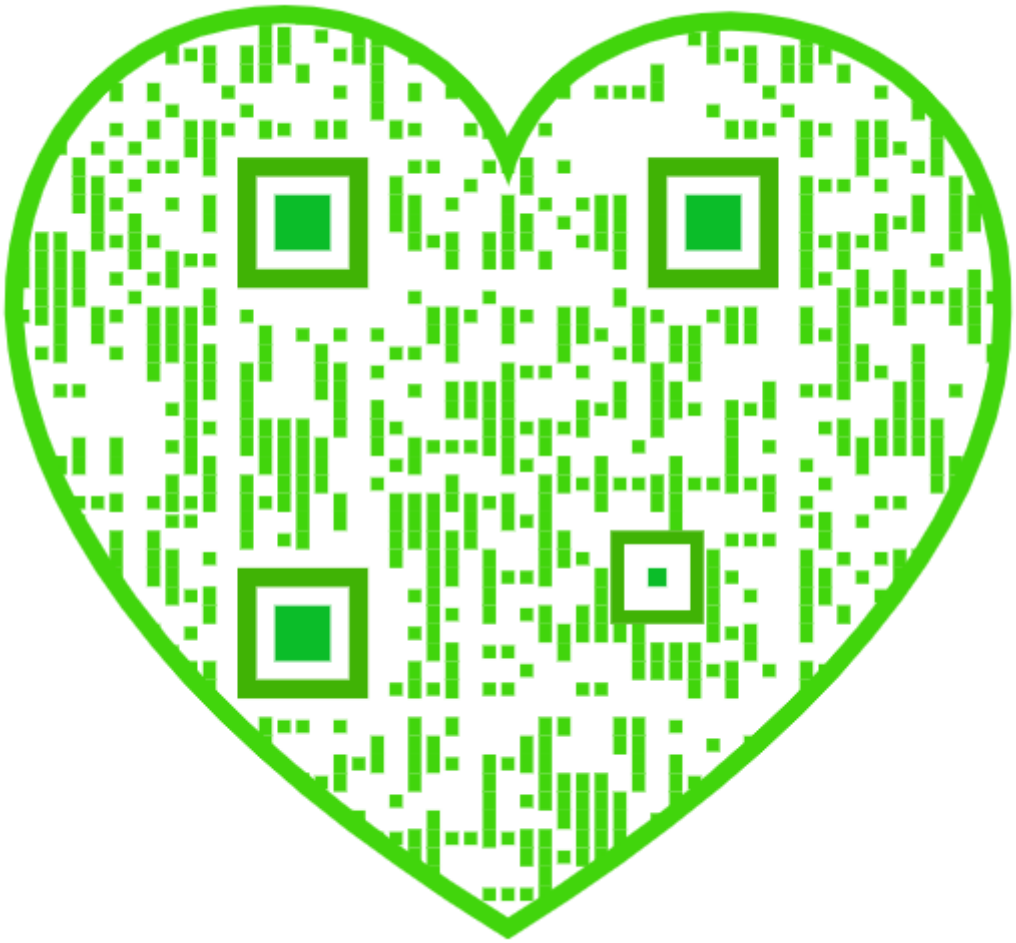

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Bee-Keepers' Convention Hand-Book, by Thomas G. Newman.—It contains the Parliamentary Law and Rules of Order for Bee-Conventions—also Constitution and By-Laws, with Subjects for Discussion. Price, 50 cents.

Bee-Keepers' Guide, or Manual of the Apiary, by Prof. A. J. Cook.—This book is not only instructive, but interesting and thoroughly practical. It comprises a full delineation of the anatomy and physiology of bees. Price, $1.

Leaflet, No. 1.—Why Eat Honey? Intended for FREE distribution in the bee-keepers' locality, in order to create a Local Market. Price, 100 copies, 50 cents; for 500, $2.00; for 1,000, $3.25.

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Swarming, Dividing and Feeding. Hints to beginners in Apiculture. A chapter from "Bees and Honey." Price, 5 cents.

Bees in Winter, Chaff-Packing, Bee Houses and Cellars. This is a chapter from "Bees and Honey." Price, 5 cents.

The Hive I Use, by G. M. Doolittle.—It details his management of bees and methods for the production of honey. Price, 5 cents.

Dictionary of Apiculture, by Prof. John Phin. Gives the correct meaning of nearly 500 apicultural terms. Price, 50 cents.

How to Propagate and Grow Fruit, by Chas. A. Green.—It contains over 50 illustrations and two large, colored fruit plates. It tells how to propagate strawberries, raspberries, blackberries, currants, gooseberries, grapes, quinces, peaches, apricots, plums, cherries, pears and apples, with cuts showing how to bud, graft and propagate from layers, etc. Price, 25 cents.

Wintering Problem in Bee-Keeping, by G. R. Pierce. Price, 50 cents.

Bee-Keepers' Directory, by Henry Alley.—Queen Rearing, etc. Price, 50 cents.

Honey-Bee; Its Natural History, Anatomy and Physiology, by T. W. Cowan. Price, $1.00.

Rural Life—Bees, Poultry, Fruits, Vegetables and Household Matters. Price, 25 cents.

A B C of Carp-Culture, by A. I. Root and Geo. Finley. 70 pages. Price, 40 cents.

Foul-Brood, by A. R. Kohnke.—Origin, development and cure. Price, 25 cents.

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Cheshire's treatment of Foul Brood.—Its cause and Prevention. Price, 10 cents.

Honey as Food and Medicine, by Thomas G. Newman.—In French. Price, 5 cents.

Langstroth on the Honey-Bee, revised by Charles Dadant.—It is entirely re-written and fully illustrated.

Handling Bees, by Chas. Dadant & Son.—A chapter from Langstroth revised. Price, 8 cts.

Blessed Bees, by John Allen.—Full of practical information. Price, 75 cents.

Success in Bee-Culture, by James Heddon. Price, 50 cents.

Quinby's New Bee-Keeping, by L. C. Root.—This is a new edition of Mr. M. Quinby's "Mysteries of Bee-Keeping," entirely re-written by his son-in-law. Price, $1.50.

A B C of Strawberry Culture, by Messrs. T. B. Terry and A. I. Root.—It is for those beginning to grow strawberries. Price, 40 cents.

Historic.—A brief history of the North American Bee-Keepers' Association, and Reports of the first 20 Conventions. Price, 25 cents.

By-Laws.—For local Associations, with name of the Organization printed. $2.00 per 100.

Ribbon Badges for Bee-Keepers, upon which is printed a large bee in gold. Price, 10 cents each. Large ones with rosette, 50 cents.

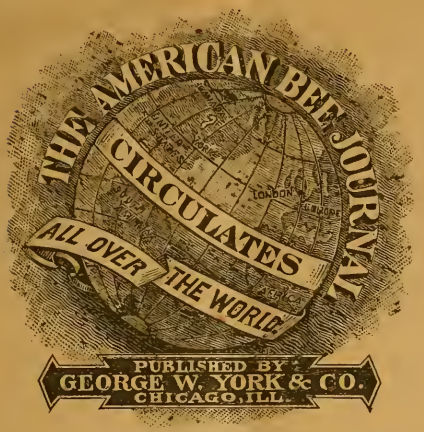
How I Produce Comb Honey, by George E. Hilton; 3d edition. Price, 5 cents.

Maple Sugar and the Sugar Bush, by Prof. A. J. Cook. Price, 40 cents.

A B C of Bee Culture, by A. I. Root.—A cyclopædia of everything pertaining to the care of the honey-bee. Price, $1.25.

Bee-Keeping for Profit, by Dr. G. L. Tinker.—It fully details the author's new system of producing honey. Price, 25 cents.

A Year Among the Bees, by Dr. C. C. Miller.—Chat about a season's work. Price, 50 cts.



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THOMAS G. NEWMAN, }
GEORGE W. YORK, } EDITORS.

Vol. XXX. July 1, 1892. No. 1.

EDITORIAL BUZZINGS.

Home's not merely four square walls,
Though with pictures hung and gilded;
Home is where affection calls,
Filled with shrines the heart hath builded.

Home!—go watch the faithful dove,
Sailing 'neath the heaven above us—
Home is where there's one to love;
Home is where there's one to love us.

Espercette is a splendid honey-plant, also excellent for forage. In the Sierra Nevada Mountains it thrives well, and the bees may be seen all day long humming around its crimson bloom.

One of the most extensive queen-breeders of America, Mr. H. B. Harrington, of Medina, Ohio, made us a pleasant visit last week. He is an agreeable and companionable man, as well as a bee-keeper having a large and ripe experience.

Honey for Analysis is desired by Prof. A. J. Cook, of Agricultural College, Mich., as there are reasons to think that the methods for honey analysis used by chemists may be faulty. Prof. Cook is now having analyses made to determine the real facts about the matter, and desires to have samples of honey that have been known to be gathered *very rapidly*—say from sage or basswood. He wishes to have the honey *at once*. Also, he wants samples of any peculiar honey, like that of honey-dew, or of peculiar flavor. It must be in every case from one who produces honey, and guaranteed to be *genuine honey*. He desires us to urge bee-keepers to send any such samples by *express* to him at Lansing, Mich., at his expense. By complying with this request, bee-keepers will not only please Prof. Cook, but aid in a good cause. Do not forget this, but if possible forward the samples of honey as directed above.

Volume XXX of the AMERICAN BEE JOURNAL begins with this number. The twenty-nine volumes that have preceded it form a very complete apiarian library in themselves, treating most exhaustively every conceivable detail in the best management of bees in the production of honey. It has come up through three decades, has not swerved in propitious or in unpromising seasons, and to-day occupies a position in the hearts and homes of thousands of apiarists in this and other lands, that has been won by faithful devotion to the best interests of the cause which it has ever fearlessly and unselfishly espoused.

The thanks of the publishers are tendered its host of admirers and ardent supporters, and they beg to express the hope that the hearty co-operation of the past may continue throughout the future years of promise.

Every Man should kno sumthing ov law; if he knows enuff tew keep out ov it, he iz a pretty good lawyer.—*Exch.*

Rev. L. L. Langstroth—the father of American bee-keeping—recently visited the home of Bro. A. I. Root, at Medina, Ohio, and among other things of interest he examined a colony of Punic bees, which he describes on page 14 of this issue of the AMERICAN BEE JOURNAL. In *Gleanings* for June 15, was the following concerning Father Langstroth and his visit to "The Home of the Honey-Bees:"

The Rev. L. L. Langstroth called upon us on Saturday, June 4, remaining over Sunday, and going away Monday night. After these 17 years of that distressing intermittent brain-trouble since we last saw him, we were surprised to see him looking so hale and hearty; and although he was 81 years old last Christmas, his mind seemed to be as strong and vigorous as ever; indeed, it was several times remarked, "What a powerful mind! what breadth of culture! what learning!"

It was interesting to see how he enjoyed talking about bees, and the later improvements. In fact, he was more enthusiastic than many of the younger bee-keepers. In spite of the fact that age is usually conservative, Mr. Langstroth seemed to be thoroughly alive to the value and importance of the *later* improvements and developments. To illustrate: Said he, with his old-time fervor, "If *money* is to come from *honey*, manipulation must be reduced to a minimum."

He indorsed thoroughly the idea of handling hive more and frames less; of using out-apiary hives; hives with self-spacing frames; hives that can be manipulated on the plan hinted at in the quotation. He still thought the new Heddon hive best for the expert and advanced bee-keeper; but he did not believe it would ever come into general use with beginners and those farmers who keep only a few bees. For the mass of bee-keepers, the self-spacing Langstroth frame and system would be used. Indeed, he even questioned whether many farmers were advanced enough to have even movable-frame hives; because, even with such hives, they *would* not handle the frames if they *could*.

n speaking of his own invention, he very modestly remarked that others before him had come very near giving to the world the Langstroth- hive; and that, if he had not invented it, it would have come very soon. Debeauvoy, for instance, had invented a hive that needed only some very slight changes in order to make a practical hive—such a one as *he* (Mr. L.) gave to the world; and that any practical bee-keeper of today could have shown in five minutes how to make, so that it would be practicable.

Father Langstroth's many old friends, who are readers of the AMERICAN BEE JOURNAL, will be delighted to know that he is able to again take some interest in the pursuit which he did so much to advance and popularize years ago. The younger members of the bee-fraternity will also rejoice to be permitted to read articles from Father Langstroth's mellifluous pen, which they, as well as older friends, feared might never again be allowed to write as of yore. All will unite in wishing yet many years of joyful life to the "grand old man" of American apiculture, ere he is called to enter the "Gates of Pearl."

Rev. W. P. Faylor, of La Porte, Iowa, sent us a few worker-bees on June 21, which arrived at the BEE JOURNAL office the next day. Mr. Faylor wrote thus when informing us that he mailed them: "I send you two cages of sample bees—one cage of six-banded Italians, and the other cage has in it four-banded hybrids. Give them a little warm honey, and let them fill up, to see just what they are." They certainly are very nice bees, all showing the beautiful golden bands.

The Prospect is good for a crop of honey, if the weather becomes steadily warm and pleasant. A moist atmosphere is just the thing for the secretion of nectar, and we may confidently expect that very soon the lifting clouds will "dispel the gloom" which has hung over us all during the past three or four months, and spoiled many a calculation. There are "silver linings" to all the clouds, and we shall soon discover their existence, and admire their lustre. Hope never dies

The Subject of Bee-Culture has been a particular subject of investigation by the Government—so says Hon. J. M. Rusk, Secretary of Agriculture, in his Report for the year 1891, a copy of which we received a short time since.

Under the head of "Apiculture" is a description of what was done during the year in the interest of bee-keeping. It states that Prof. A. J. Cook, of the Michigan State Agricultural Experiment Station, was commissioned Jan. 1, 1891, for a period of six months, and Mr. J. H. Larrabee, of Vermont, was appointed to assist him. Experiments, some of them in continuation of those instituted previously by the Michigan Station, were undertaken with a view of determining the value of special planting for honey; the effect on bees of the poison used in spraying fruit trees; the value of bees as fertilizers; the introduction of an improved strain of bees; a determination of the amount of honey required to produce one pound of wax; whether the worker-bees feed the drones albuminous food; and to determine the conductivity of wax.

Among the results apparently proven by the experiments of the season, we may mention the following:

A number of honey-plants were tested, and the conclusion was reached that none of them would pay for cultivation for honey alone.

A second experiment indicated that spraying with arsenicals should not be carried on while the bees are visiting the blossoms of fruit trees.

Another series of experiments showed conclusively the value of bees as fertilizers.

The result from the next series of experiments seems to indicate that 11 pounds of honey is the amount required to produce one pound of comb. This result is at variance with the results obtained by other workers.

The experiments made by Schoenfeld, of Germany, on the character of the food of drones resulted in the same conclusion, viz.: that drones are given the same kind of albuminous food as the queens and the larvæ, and that without this food the drones cannot live longer than three days at the outside.

Experiments upon the conductivity of wax indicate that for practical purposes it has about the same as the board partitions of hives, and rather greater than the full comb.

On July 1, Mr. Frank Benton, a well-known apiarist, was appointed for the purpose of conducting further investigations. Mr. Benton has been stationed at Washington since the date of his appointment, and has been engaged for the most part in placing the apicultural work upon a good footing, and devising a series of experiments to be carried out during the next season.

Sick or Starved Bees.—Mr. C. F. Lang, of La Crosse, Wis., wrote us as follows recently regarding his bees which seemed to be affected by some disease, and sent a sample of the bees:

I notice on page 771 of the BEE JOURNAL of June 9, 1892, that Mr. Otto Semke wrote that some of his bees are sick. I have one colony infected with the same disease, from which I send you a sample. They are strong otherwise, but are losing every day from 50 to 100 bees, where the others, I notice, have hardly any in front of the hive. I tried to cure them with a few drops of carbolic acid on a rag. It did not do any good, and I gave them salt in sugar syrup, but that did not help any, either. C. F. LANG.

Prof. Cook, to whom we forwarded the bees for examination, says:

The bees from Mr. Lang seem exactly like those from Mr. Semke. I presume the better weather of the last few days has put all to rights.—A. J. COOK.

Mr. P. L. Norton, of Lanesboro, Pa., also had some bees affected somewhat similarly to those of Mr. Semke and Mr. Lang, and on June 14, 1892, wrote thus concerning them:

I send a few workers and drones afflicted the same as are Mr. Otto F.

Semke's, according to his descrition in a recent number of the BEE JOURNAL. The colony is one of the strongest I have in my yard, containing 70. They seem to be working to a considerable extent, gathering pollen and honey. There is no other case in the yard as yet, as I can discover. P. L. NORTON.

In regard to the above mentioned bees, Prof. Cook writes:

Both drones and workers, which Mr. Norton thinks are dying unnaturally fast, seem bright, and show no sign of disease at all. Indeed, their intestines and stomachs are almost empty. Can it be a case of starvation? The appearance suggests a very meagre diet.—A. J. COOK.

Other Bee-Periodicals have been giving us some much-appreciated notices in recent issues of their papers, for which we make our best bows. It is a matter of particular note, and a thing to be greatly admired, when such sincere feelings of fraternal regard exist among those who are conducting the publishing of the current literature of such an extensive industry as bee-keeping. It is an omen of good, and indicates that there is promise of great advancement along all lines relating to the pursuit which all the best bee-periodicals are endeavoring to aid.

Mr. W. Z. Hutchinson, editor of the *Bee-Keepers' Review*, at Flint, Mich., besides giving in his June number a portrait engraving of the BEE JOURNAL'S new editor and proprietor, wrote as follows concerning the change:

After having been for 19 years under the management of that veteran editor, Thomas G. Newman, the AMERICAN BEE JOURNAL has passed into the hands of George W. York & Co. Continued poor health compelled Bro. Newman to make this change. The supply trade and the *Home Journal* still remain in the hands of Thomas G. Newman & Son.

Although Mr. York is a young man—30 years old—he is not without experience in the publishing of a bee-periodical. Almost the first time that I visited Chicago, some eight or nine years ago, I found him at work in the BEE JOURNAL office, where he had been several months. He has been there most of the time since, and now industry and perseverance get their reward.

Mr. York and I "took to each other" at once, and in the friendly chat that followed, he told me that he and a fellow workman were saving money by keeping "bachelor's hall." Perhaps this is "telling tales out of school," but this little thing raised Mr. York wonderfully in my estimation, and I wish my readers to share in this feeling.

The next time that I met Mr. York was when the North American met at Indianapolis. He had just returned from his wedding trip, and his heart was overflowing with his newly-found happiness. We occupied the same room at the hotel, and the long, confidential chats that we had over life and its problems, gave me a still deeper insight into his nature.

When next I visited Chicago, I slipped away from the convention one evening and visited the pleasant home of Mr. and Mrs. York. Since then I never go to Chicago without having a chat with "George," and I feel that of all the bee-keeping editors, I am the best acquainted with him, and that I am qualified to say that the readers of the AMERICAN BEE JOURNAL will find their new editor to be fair and fearless, genial and just.

The *Review* and AMERICAN BEE JOURNAL will pull together tip-top.

Mr. Ernest R. Root, associate editor of *Gleanings in Bee-Culture*, published at Medina, Ohio, had this to say in the issue of June 15:

We were greatly pained upon seeing the announcement that the health of Mr. Thomas G. Newman has been such that he was obliged to sell the AMERICAN BEE JOURNAL, the "old reliable," that has been so successfully conducted by him for nearly 20 years. We have known for some time that Mr. Newman's health has been very poorly; but we did not suppose that it had come to such a pass that it would be necessary for him to dispose of some of his business interests. We are very glad to learn, however, that the JOURNAL has been transferred to entirely competent and worthy hands in the person of George W. York—an old assistant and employe, who has for eight years been more or less connected with the publishing and editing of the JOURNAL.

Mr. York is full of business vim and enterprise; and we have no doubt that the change will be better for all parties

concerned. We extend our right hand of fellowship to the new publisher; and it will give us great pleasure to co-operate with him as we did with Messrs. Newman & Son.

Mr. York is a young man of just our own age; and although we have never met him, we have a sort of kinship feeling for him already. In our next issue we hope to introduce him formally to our readers, through the medium of a biographical sketch and a portrait engraving.

We are glad to know that Thomas G. Newman still remains as one of the editors of the BEE JOURNAL; and we may therefore expect—though perhaps less frequently—the same characteristic and vigorous editorials that have graced the pages of the JOURNAL in the past; and these supplemented by those from younger blood, will add life and strength to an already flourishing paper.

Mr. A. G. Hill, editor of the *Bee-Keepers' Guide*, of Kendallville, Ind., gave the following notice in the June number of that paper:

Owing to failing health, Mr. Thomas G. Newman has thought best to sell the AMERICAN BEE JOURNAL to George W. York, who has been employed by him to aid in its publication for a number of years. With his experience in the office, the paper has, no doubt, fallen into capable hands. Mr. Newman gives up "the old reliable" AMERICAN BEE JOURNAL with many regrets.

Mr. D. A. Jones, editor of the *Canadian Bee Journal*, in its issue of June 15, after publishing the notice of transfer of the BEE JOURNAL, said:

We wish our friends every success in the undertaking, and hope that the same brotherly feeling may exist among us as has existed heretofore.

Smoke and Smokers is to be the special topic for the *Bee-Keepers' Review* for July. Bro. Hutchinson concludes his "leader" in introducing the subject, with these words: "Now let smoker makers and users criticise and comment, and contribute their views for the July issue." It promises to be an interesting number.

Don't Fail to read all of page 5.

Prevention of Granulation in honey is often desired, and so Mr. J. L. Wilgus, of New Comerstown, Ohio, asks the following question about it:

Please let me know what will keep sugar syrup from candying in brood-combs, and what proportion to the gallon. J. L. WILGUS.

In reply we would say that tartaric acid is often used to prevent the granulation of sugar syrup in brood-combs. Another plan, and one that is recommended very highly, is to stir in about two pounds of extracted honey when you remove the syrup from the fire. That will retard granulation, if not totally prevent it. It will also impart the honey-flavor to the syrup, and will be thereby more acceptable to the bees. Some years ago, the *Scientific American* contained an item upon this subject, and the correspondent advised putting "one ounce of glycerine to 1½ pounds of honey, setting it aside to cool."

Beeswax is now being imported in large quantities, as will be seen by the following item from the daily papers:

Many tons of beeswax are imported to New York from tropical and subtropical parts of this continent, and from Spain.

This probably accounts for the recent decline in prices. Another reason is the fact that but little comb foundation is being used this year, because of the extremely wet and backward season. The call for beeswax for that purpose is small, and the market is glutted in consequence. This "peculiar season" has been distressing to many branches of trade, but it seems that a change for the better must come soon.

Some did not quite comprehend the notice of sale as published on page 727. Messrs. Thomas G. Newman & Son have *not* disposed of the Bee-Keepers' Supply Business or the *Home Journal*. Both will be continued as heretofore, at the same location as before, 199 East Randolph St., Chicago, Ills.

Mrs. Wasp and Mrs. Bee.

Said Mrs. Wasp to Mrs. Bee,
"Will you a favor do me?
There's something I can't understand,
Please, ma'am, explain it to me.

Why do men build for you a house,
And coax you to go in it
While me—your cousin—they'll not let
Stay near them for a minute?

I have a sting, I do confess,
And should not like to lose it:
But so have you, and when you're vexed
I'm very sure you use it."

"Well," said the bee, "to you no doubt,
It does seem rather funny;
But people soon forget the stings
Of those who give them honey."

—MARGARET EYTINGE.

QUERIES AND REPLIES.

Caged Queens and Queen-Cells.

Query 825.—When the queen is caged in the heighth of the honey season, will the bees start queen-cells?—Mattie.

Yes.—E. FRANCE.

Yes.—J. P. H. BROWN.

Yes, usually.—P. H. ELWOOD.

I think they will.—M. MAHIN.

Yes, sometimes.—DADANT & SON.

Almost without fail.—JAMES HEDDON.

Yes, if there is available brood.—G. L. TINKER.

Yes, often, if not usually.—JAMES A. GREEN.

Yes, if confined for several days.—J. M. HAMBAUGH.

A large proportion of colonies would.—R. L. TAYLOR.

They generally do for me, perhaps always.—C. C. MILLER.

I have never tried caging at such a time.—EUGENE SECOR.

Not if she is young, and is not caged too long.—A. B. MASON.

Yes, if there are eggs and larvæ in the hive.—G. M. DOOLITTLE.

Most invariably, if she is caged any length of time.—MRS. J. N. HEATER.

They have never done so for me, but my advice is, "Don't cage your queen."—MRS. L. HARRISON.

As I understand your question, I will say that I don't "fool" with my queens in that way.—H. D. CUTTING.

Yes, ma'am; if you keep her caged long enough, say two or three days. My bees will.—MRS. JENNIE ATCHLEY.

They will be very likely to do so when they have eggs or larvæ, and the hive is becoming crowded.—C. H. DIBBERN.

Not as a rule, but I have known them to do so, but not until after she had been confined for some time.—J. E. POND.

Not usually, if well at work in the sections. The bees will not always behave the same way, in such cases.—A. J. COOK.

In most cases they will, if the swarming impulse moves them. In a few cases I have had young queens mated in a hive where a queen was confined in a cage.—G. W. DEMAREE.

If the queen is caged for two or three days, the bees will generally start queen-cells, especially if there are eggs and larvæ in the hive.—EDITORS.

The Farmer and Breeder for June 15, in which our friend, Mr. Eugene Secor, conducts the "Bee-Column," contained the query, with all the answers, upon the subject of "Drones from an Unfertilized Queen," which was published in the BEE JOURNAL for June 2, 1892.

Circulars have been received at this office from the following:—

H. G. Quirin, Bellevue, O.—4 pages—Italian Queens.

F. L. Wright, Nurseryman, Plainfield, Mich.—1 page.

G. P. Morton, Prairie Home, Mo.—10 pages—Bee-Supplies.

Western Mfg. Co., Spring Valley, Minn.—32 pages—Bee-Supplies.

J. F. Michael, German, O.—16 pages—Five-Banded Golden Italian Queens.

Be Sure to read offer on page 5.

COMBED AND EXTRACTED.

Starting Bees in the Sections.

Have the sections all ready before the honey-flow begins, with good straight structure of comb foundation fastened into them, which is very quickly done with a Parker foundation fastener, or any of the section presses now in use, or if you have no such machine, you can do very good work with a common table knife. Lay the edge of the strip of foundation in the middle of the top part of the section. You can then with the point of a stiff knife press the edge of the comb so firmly against the wood that the wax will adhere. To do this, however, you must choose a warm day, for if it is too cool the wax will not work.

To get the bees started to work, it is best to put in some sections with some comb in them, if you have any unfinished sections left over from the previous season, which all bee-keepers do have; these are very enticing to the bees, and will not fail to start them at work, especially if the honey-flow is good, and the colonies are strong in bees.—M. H. DE WITT, in *American Apiculturist.*

Finding a Black or Hybrid Queen.

To find a black or hybrid queen often baffles the expert. Much care at the beginning is the great secret of success. Open the hive slowly, without jar, and use as little smoke as possible. Be very careful not to kill bees, and if possible have an assistant to look on one side while the operator scans the other. If the bees run down and cluster on the lower edge of the comb, by a movement gained by practice, turn the comb bottom side up, always keeping it on the edge.

As fast as the combs are examined, place them in an empty hive, and if not found after the combs are all out, look in every corner of the hive, and also in the entrance, to be sure that the queen is not there, for black queens are very apt to leave the combs and hide in a corner, sometimes even running out and under the hive. If not now found, proceed to replace the combs, giving them a thorough examination as they are replaced. If still unfound, it is better to close the hive and try again in a few hours.

If robber bees are inclined to bother, do the searching at about sundown, as then the robbers cannot do much harm before dark. These directions should enable any one to find a black queen without much trouble.—G. M. DOOLITTLE, in *National Stockman.*

Too Small Queen-Cages.

Of four queens sent, about a month ago, to E. G. Clark, of Wausau, Wis., two, sent in ⅞ cages, arrived in good condition. The other two were sent in small ½-inch cages, and one was dead upon arrival, and the other in bad condition. Mr. Clark writes that he has had similar experiences before in getting queens. I have always had a prejudice against those *small* ½-inch cages; I must admit, however, that I have received queens in good condition in these cages. My opinion is that it will not answer to *crowd* the bees. In cool weather, when a larger number of attendants are needed, then larger cages are needed; in hot weather, when eight or ten bees are sufficient for a body-guard, the small cages will answer; but to save a cent in postage by using a little, cramped up cage, and lose a queen worth a dollar, as the result, is "penny wise and pound foolish."—*Bee-Keepers' Review.*

Making Honey-Vinegar.

Those who work bees for extracted honey should not lack for the best of vinegar. Honey should not be extracted until it is thoroughly ripened by the bees, which ripening is shown by the bees capping the cells. These cappings are easily removed preparatory to extracting, with a honey knife. After being removed, they are allowed to drain for 24 hours, when they are rinsed in a tub containing spring water. After remaining in the water a few hours, the cappings are squeezed into a ball (like a snow ball) and laid away. The rinsing is continued until the water will float an egg, when it is set in a cool place for vinegar. In about one year it becomes the best flavored and colored vinegar to be found, and in all respects, and for all purposes, is better than any cider vinegar ever made. It becomes vinegar more speedily in stone crocks, covered by mosquito netting, and set in a cool place, making fine vinegar in 90 days, but much better in 365.—*Selected.*

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

My Impressions of the Punic Bee.

REV. L. L. LANGSTROTH.

Having had, for the first time, an opportunity of seeing the so-called Punic bee, in the apiary of Mr. A. I. Root, I will give my impressions of it, formed from what information I could procure from the apiarist, Mr. Spafford, who has the care of Mr. Root's bees.

The single colony in the apiary was far from being strong when put into winter quarters. At the present time (June 4) they are much stronger in bees and brood than any other colony that last season was of about equal strength.

I expected to find them quite dark—much darker, indeed, than the common so-called German brown bee. Nothing, however, in their *color* would have suggested to me the idea that they were not ordinary black bees (I should have been much better pleased if Mr. Root had had a single colony of pure black bees); nor did they seem much if any different in size from that bee. Of course, there were some bees in the colony with Italian markings; but these were evidently strangers which had intruded themselves upon the Punics, as all the young bees appeared to have the same markings.

When opened the first time, and carefully looked over, the queen was not found. The bees were much agitated, and acted almost precisely like ordinary black bees—racing backward and forward on the bottom-board, and over the sides of the hive. A second search for the queen was equally unsuccessful.

This morning (June 6) the weather being as favorable as it could be, bright, warm, and calm, with the help of Mr. Spafford, and without any assistance from Mr. Ernest Root, who wished me to give my own impressions, without any suggestions from him, I carefully examined them again. I gave them sufficient time to fill themselves with honey before the combs were lifted out. The same agitation which I noticed on Saturday, June 4, I noticed again—the bees running from one side of the bottom-board to the other, and evidently acting, as nearly as I could judge, much like black bees.

We took out the frames and examined them at least three times before we could find the queen. Four years ago, in the apiary of Mr. James Heddon, of Dowagiac, Mich., I saw more than a dozen hives opened, and the queens were found, I should say, in half the time that we spent in finding this one queen, which was noticed near the bottom of a frame, evidently frightened, running around the corners, and seeking in every way to hide herself. In this respect she seemed to me to act like an ordinary black queen.

As to the bees, they were not as "scary" as I have frequently noticed the blacks to be. When a comb was lifted out they did not string out from the bottom of it and drop upon the grass, ready to crawl up my pants, as is so common with the black race.

Now as to the color of the queen: She was not nearly as dark as I expected her to be. I know that I have seen many imported Italian queens darker than she was. On a mere superficial observation one might have declared that we had here nothing but common black bees; but a more thorough examination suggested that they might be a cross of, say, the black with some other race. The color of the queen might again suggest that the Punics were a cross between the black and the Italian races, as the so-called hybrid Swedish clover resembles in many respects the red and white clover, seeding in the first crop like the white, and sending up many stalks of blossoms, like the red, the size and color of the bloom being a beautiful compromise between the two kinds.

Now, it is quite supposable that the Punic, so-called, may be a cross between the black and some of the yellow races, and may have been, like the Morgan horse, the starting of a race of bees possessed of uncommon and valuable peculiarities. We know that the Morgan sire so impressed himself upon his progeny, that even now, after many generations, there can easily be seen in Morgan horses the type of their great ancestor.

The question then arises, How can we decide that this bee is worthy of propagation? It evidently has some of the bad qualities of the black bees, such as its "scary" nature, and the difficulty of finding the queen. I could not, on so short an observation, decide whether it had the cowardly nature of the black bee; whether in nuclei made of this race we should find them so easily discouraged as to "skedaddle" on the first appearance of adverse circumstances.

And, again, it is impossible, from so slight an observation, to know whether, like the black bee, it is a natural-born

robber, causing often the most trying difficulties in the management of an apiary. Nor could I tell whether, when an attempt should be made by other bees to rob it, how brave a defense it would make. We all know that the black bee is by nature such a coward that often, when attacked by great forces of its own, or other races (like the dog that drops its tail in the fight, and is soon a beaten dog, or the cock that runs, after a few exchanges of blows), it will give up the battle and suffer itself to be robbed of every thing; or even, like the black race, join forces with the robbers, and rob their own hive. If I had only a single warm day which I could spend in observations, I could easily, in ways which I have not time to suggest, decide these points.

Now, as to the conclusion of the whole matter: I would not advise any one to attempt at once to supplant the good races of bees which are in his apiary, with this race; nor would I so condemn it as to say that nearly every enterprising bee-keeper ought not at least give it a fair trial. In a single season, if the season is a favorable one for honey, I believe all the disputed points will be settled, and no one would rejoice more than myself if it should prove, like the Morgan horse, the progeny of an improved and improving race of bees.

My readers will bear in mind that these observations were made upon only a single colony—that this colony might not have been entirely pure, and that I had not any blacks with which to compare it.

Dayton, O.

Visits Among Iowa Bee-Keepers.

THOS. JOHNSON.

On May 16, upon examining my bees after about three weeks' absence, and finding them in good condition, I continued my visits among Iowa bee-keepers, but saw none of any prominence until I reached Audubon. I there saw Mr. S. Webster, who has an apiary of about 75 colonies. He was somewhat discouraged, but I believe the discouragement was mostly on account of something else besides bees.

I next saw Mr. E. S. Taggart, of Larland (not of Coon Rapids, as my article has it on page 510 of the BEE JOURNAL for April 14, 1892). After spending a short time with Mr. T., I took the train for Manning, where I was delayed until 3 a.m., in one of the worst storms I ever witnessed. I then took the train for Coon Rapids—what the railroad men call the "flyer," but I called it the "leaker," for the rain poured in at the roof in torrents.

After arranging my affairs, I went to Manilla, by way of Manning, where I waited 24 hours for a train. There being no prospects of getting on the right track, I started for Council Bluffs, arriving there at 10 a.m. I boarded the Northwestern train, which took me in a northerly direction, up the old Missouri river, at the station called "Honey Creek," where I saw an apiary of about 50 colonies of bees. By the way, it looked more like a stump-yard than what it really was. For the want of the old Virginia gum, the owner nailed rough boards together for hives, and I think if he gets any surplus it will be on the old brimstone-pit style.

At 1 p.m. I arrived at Missouri Valley, Harrison county, where I met D. M. Harris, of the Missouri Valley *Times*—a daily and weekly paper. He said that he used to handle bees some twenty years ago, and I had no right to dispute him, for I knew of him in Guthrie county to run an ox-team, and also as a member of Congress and Probate Judge. His son and I ate hard-tack together at Porkers' Cross Roads, Tenn.; that is the State where our honey-prophet lives—Mr. Sam Wilson. Mr. Jas. Harris was in an Iowa regiment during the civil war, and I was in an Ohio regiment.

Here I learned that there was little honey in 1891, my informant being Mr. J. W. Fouts, an experienced bee-keeper.

At 9 a.m. on Friday, I took the train for Logan, the county seat of Harrison county, where I visited the apiary of J. H. M. Edwards. Last fall he had 42 colonies, and now has 14 left. Mr. J. D. Frick had 20 colonies last fall, and lost 16. It was May 20 when I visited there, and while I walked ¾ of a mile, the snow fell in torrents, and at Mr. Edwards' residence the mercury was 36.4° above freezing. I would like to say more on the loss of bees at this place, but time would not admit of it.

I left at 7 p.m. to visit Dunlap, where I saw Mr. E. J. Cronkleton, who had 45 colonies of bees last fall, and now has only 28 left.

I next went to Dow City, where I met Mr. Wiggins, who had 46 colonies last fall, and now has only 8 colonies left. He has been in the bee-business about three years.

At 7 p.m. on Saturday I arrived at Denison, where I met several prominent

bee-keepers, among them being N. J. Wheeler, who spent last year on the Pacific Coast, and his wife had sold all of his bees excepting 10 colonies, and out of the 10, fall count, he had 2 colonies left this spring.

The next day I visited Mr. W. J. Cochran, one mile east of Denison. Last fall he had over 100 colonies, and had 55 left this spring; G. M. McAhren had 32 colonies last fall, and this spring 12; L. J. Carter had 26, fall count, and only 7 colonies left this spring. In the apiaries of Mr. Cochran and Mr. Carter, bees were living on their larvæ, uncapping their brood, and eating what substance the brood had, in order to keep alive. Talk to me about spring dwindling—this is starvation and poverty!

Mr. G. W. Stevens had 10 colonies in the fall, and for want of stores, he had only 3 left. He was nursing his bees, and if the balance die, it will be caused by too much nursing. Mr. S. has a model frame spacer, which might take the place of the Hoffman self-spacing arrangement. I believe there is no town in Iowa where there has been any more time and money spent in trying to invent apiarian improvements, than in the town of Denison.

Coon Rapids, Iowa,

Self-Hiving Arrangement for Swarms.

WESLEY DIBBLE.

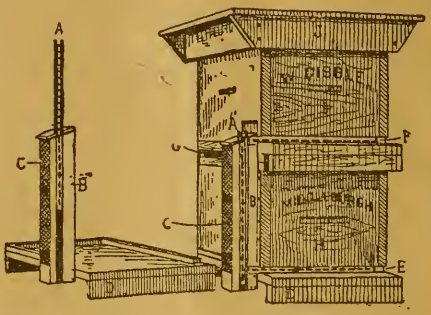
Are self-hivers worth anything? Do the parties who advertise them, make them, and sell them, deserve to be recognized as truthful men? Can we go to their yards and find these parties using what they advertise? Are they succeeding exactly as they tell us they are? If so, let us give these men credit.

What is a perfect success with them would be a total failure with others by a little deviation from their plans. Go slow now, and give these men justice; give them credit for their hard-earned invention. The picture will hardly need any description, as it is so plain. It is intended to carry a swarm from the lower to the upper hive. It would be amusing to you to see my museum of traps since 1888 to accomplish the above object. I have succeeded far enough to say, when you visit me you will find these traps in use all through my yards.

One object I have always in view: Give the bee free access to the hive, and do not obstruct the entrance. A trap of any kind in front of the hive is a hindrance to the bees. It affords a shade and place to cluster in front, and in real hot weather it is a nuisance. To illustrate:

I have an out-yard supplied with entrance traps. The bees are lying out, covering the traps and fronts of hives. Now, I arrive at this yard at 4 p.m., because I cannot get there sooner, and I find from 1 to 10 colonies have swarmed during the day. What would be the chances of knowing which one of those colonies swarmed? Give us an intelligent answer if you can.

Put *me* down as saying, the man who succeeds in giving us a successful trap of any kind will give us something besides an entrance trap. We must have a trap when we can at a glance tell



The Dibble Self-Hiver.

where our queens are. We must know instantly, when passing through a yard, which colonies have cast swarms, *without opening a hive.* We haven't any time to spare in digging clusters of bees from in front of hives. We are, for instance, alone with three or four yards to care for, and cannot get intelligent help, and the family is large; bread and butter to get; children to school and clothe; and perhaps, as I have, invalid parents to take care of. You see, it is a good deal like the boy digging a woodchuck beside the road on Sunday morning. The minister comes along and says, "My boy, do you expect to get that woodchuck?" "Yes, sir," the boy says; "got to get it; the minister is going to be at our house for dinner, and we have no meat." The minister got woodchuck meat for dinner. We have got to "get there," as did the boy, and get meat for dinner. Now, look at the above picture, and I haven't a doubt but you will want to ask some quetions.

What, kind of hive do I use? Eight-frame, 9⅛x17⅝, Langstroth exactly. I

use the frame reversible by notions of my own. I like them after five years' experience.

How does the trap fasten to the bottom-board? A small strip of tin nailed across the trap slides behind one like it nailed on the bottom-board. With these, one can put on or take off 100 in half an hour.

Where does the queen get into the trap? Cut off the strip on the bottom-board, 2 inches; slot in the trap to correspond; and also the top of the trap connects with the upper hive in the same way. There are two cones in the trap, so arranged they will not clog. The trap furnishes a cavity for dead drones and bees, bees having free access to the trap by the queen-slide, as shown in the picture.

The next article will be a continuation of self-hivers hived at the side; size of swarms, etc.—*Gleanings*.

A Boy's Experience in Bee-Keeping.

ED. CLARK.

I caught the "bee-fever" in the summer of 1887, when only eight years old, from reading an article on bees and honey in an agricultural paper. At that time my parents kept a few bees, and during the summer they gave me a colony for my own. The next summer I got another colony, both of which were in box-hives.

I began gathering up all the knowledge that I could pertaining to bees and their management when I first became interested in them, and by the time I had my second colony I knew about the frame hive. I thought I would like to try one of them, so I had one made, and transferred one of my colonies into it. I then had a colony of bees in a frame hive, but knew very little about how to manage them.

I then decided that I needed a bee-paper, and sent for sample copies of several, among them being the AMERICAN BEE JOURNAL. When I received them I examined them carefully, and subscribed for the BEE JOURNAL, which was a great help to me. From reading it I found that most bee-keepers preferred the Italian bees instead of the common blacks; so I procured a queen that was warranted to produce bees with three yellow bands, and in due time she arrived all right. The next thing was to introduce her; but when it came to this I began to get nervous, for I was afraid that the bees would not like this yellow queen for a mother, when they had been used to a black one. But I guess they must have liked her a little too well, for after waiting a few days after she had been introduced, I looked at her, and found a large part of one wing missing, which I think the bees bit off.

I have increased my bees to 8 colonies, which are in Simplicity hives, and I have Italianized 3 colonies. I do not have the advantage that some beginners have, of talking to an experienced apiarist, for there are none such near me.

So far this has been a rather poor year for bees. I have had no swarms yet.

Nat, Ala., June 18, 1892.

The Races of Honey-Bees.

G. W. DEMAREE.

It is really more difficult to be practical than it is to be learned and precise.

It is generally conceded that all honey bees, *Apis mellifica*, most likely, had their origin in one common parentage. But this does not settle the question of races. Now, I say it is most probable that at a very early period in the history of the world, the race of honey-bees was divided by some cause, no more mysterious than many other things we see in nature, into two distinct races—black and yellow. The intermediate colors so common in varieties of bees indicate this, besides we see the same thing in the wasps and ants. I believe, and I think my belief is based on substantial reasoning and observations, that there are two distinct races of bees, from which all the intermediate strains or types of bees had their origin, and this accounts for the tendency of the different types of bees to sport in breeding.

It is the most reasonable thing in the world that the striped types of bees should sport most in their breeding, because everything pertaining to their history goes to show that they are a more recent type than the more solid colored types are. Many persons contend that the Carniolan bees belong to the dark or black race of bees. Of course this is a mistake, brought about by the common weakness of "jumping at a conclusion," rather than by the slow process of careful investigation. The Carniolan bee does not belong to the "black race" of bees. They are an intermediate type of bees with a strong tendency to the yellow. I have never seen a colony of

Carniolans become darker by breeding them promiscuously. In my experience of three years with the Carniolans their tendency has been toward the yellow type.

If anybody doubts this let him introduce some Carniolan queens into his apiary of pure German bees, and he will find the out-cropping of yellow blood sooner or later.

The difference between the Carniolan and the German types of bees is as *marked* to the practical observer as is the difference between the Italians and the Germans; not merely as a matter of color, but in general make-up as a distinct type of bees. I have believed for some years past that the old so-called German type of bees is much older in its formulation as a type of bees, than any of the striped or banded varieties. This I judge from the facts that they sport in breeding less than any of the banded varieties.

In my experience with the Carniolan variety I have found that they *sport* in breeding to a remarkable degree, and this has led me to believe that they are a recently formulated type of bees.

The Punic or Tunisian race of bees has not been under the observation of persons competent to judge, long enough to pass on their qualities.—*American Apiculturist.*

Christiansburg, Ky.

Bees in Grand Traverse Co., Mich.

C. A. MONTAGUE.

Our county association, which adjourned subject to the call of a committee, composed of the President and the Secretary, has passed by the annual meeting, so it is not an easy matter to be posted on the general outlook. There are a few points, however, that compel our notice. One of these is the wintering problem.

Last winter was one that makes the most of us sick, who wintered bees in the cellar. So far as my observation extends, there has been more or less loss by all except *one* bee-keeper, who "winters" and "summers" his bees in large cases with a *tight* bottom and sides. He leaves about an 8-inch space all around, which is filled with loose chaff. This man "wintered" and "springed" 58 colonies without loss, and all are in the best condition I ever saw bees. A large portion of their stores was unripened honey.

I am afraid very few bees would be kept here, if when working for extracted honey one upper story would hold the season's product, without extracting meanwhile. Our bees have had nothing but fruit blossoms so far, but a few of the supers, judging by their weight, must be about half filled. During our principal honey-flow I have sometimes lost by not extracting more often than once a week.

Another point, and one I have felt "sore" about for years, viz: So much is said about white clover and white clover honey. We have plenty of that clover, but it is seldom I have seen bees at work on it. I have not the slightest idea what *genuine white* clover honey tastes like.

At present the prospect is most excellent for a good honey crop, but we can tell better next fall.

Archie, Mich., June 14, 1892.

Texas Bee-Notes—Queens Mating.

A. C. ATEN.

We have had a very favorable season here for corn and small grain—neither too little nor too much rain.

Wheat and oats ripened without any rust, and are plump and nice; they are now in shock, and much is already threshed.

Corn is just coming into roasting ear, and the crop is assured, unless some unlooked-for calamity should overtake it.

Cotton has had the hardest time of all, but is now generally looking well. It has been rather cool for it, and insects have injured it a great deal. Cut-worms destroyed thousands of acres, and some farmers have had to plant over two or three times; cut-worms were never known to injure the cotton before.

Bees have not done well on account of cool weather, and very high winds. The wind would blow so hard for a week or more at a time that bees could do but little, and no doubt thousands perished.

I have taken but little honey yet, but my bees are now in fine condition, and unless the season is different from what it ever has been, we will get plenty of honey yet. I have had but 5 swarms from nearly 200 colonies; I give them plenty of room, and am never much troubled with swarming.

THE MATING OF QUEENS.

Mr. Geo. F. Robbins wants me to make a more probable guess in regard

to bees mating. (See page 479 of the BEE JOURNAL for April 7, 1892.) Allow me to say that I can account for the pure mating of his and Mr. Wheeler's queens one year and the failure the next. The probability is that although there was such an overwhelming number of black colonies in the neighborhood, that there were very few, if any, black drones at that time, while in the very few Italian colonies there were plenty of drones (this often happens); of course, the young queens were purely mated.

The next year the black colonies were full of drones, and there being at least 25 black colonies to one Italian, of course the greater portion of the young queens mismated. If he had reared queens that year from an imported queen, it would have been the same. It takes no "guessing" to know this. Any one that has ever reared queens from an imported mother, knows that when there are blacks in reach, that quite often the young queens produce bees from three-banded to almost black.

Round Rock, Tex., June 16, 1892.

Rearing Bees for the Harvest.

MRS. L. HARRISON.

Bee-keepers have had an abiding faith that there would be a good crop of clover honey this year. The rains we have had will bring forth summer and autumn flowers; where floods have destroyed crops on the lowlands, they will have a rich deposit, and Spanish-needles, beggar-ticks, black-heart and other weeds, will possess the land, and secrete autumn honey. White clover is "spreading itself like a green bay tree," and sweet clover is luxuriant.

The bees which will gather the crop of white clover honey, if there should be one, must be reared from the product of the sugar cane. A barrel of granulated A sugar is now being rolled into my honey-house for their use. Bees are very wise little folks, and they do not allow the queen-bee to rear a large family of young ones to starve. As soon as their out-go exceeds their income, she is told to reduce her egg-production, and even some eggs already laid are eaten by the workers. Therefore, when there is no income, brood-rearing ceases, and the colony gradually grows less.

It is the instinct of the bee to gather nectar from blossoms, and from the exudations of leaves and plants, and not to sip syrup from a dish like a fly, and they will only consume the syrup as a last resort. As soon as honey is to be gathered from flowers, they neglect the feeders, flying off to the fields to gather their natural food.—*O. Judd Farmer.*

Peoria, Ills.

Bee-Feeders, the Season, Etc.

MILTON LIMES.

I have seen several feeders described in the BEE JOURNAL, so I thought I would describe mine. I make a box the size I want, 2½ inches high, then put in partitions 2 inches high, and ½ inch apart. The first partition is for syrup, and the next is open in the bottom for the bees to go up; the next two are for syrup, next for the bees, and the next for syrup. Then I take propolis scraped from the sections, melt it, and propolize the feeder inside. I then place the feeder on the brood-frames, and cover with wire-cloth. Lay one or two pieces, ½-inch square, crosswise, to hold up the wire, then cover all with a cushion.

You can make them of any size to suit, from ½ pint to one gallon. It is a feeder that will not leak, and no robbers can get at it. You can feed in the spring earlier with it, and with no danger of chilling the brood. I have had bees to come up and take food when it was 15° or 20° below freezing.

I have been keeping bees for three years. I commenced with 4 colonies, and I now have 11. I have asked the bees a great many questions, and they say that if I do not hurt them they will not hurt me. I have blacks, hybrids, and Italians, and I cannot see much difference in their temper, if I am careful in handling them. I like the Italians best, because they breed up in the spring the strongest. The colony that gave me the most honey has an Italian queen mated with a black drone. I saw her when she came out to take her wedding flight. She was gone nine minutes, by the watch. Another one was out seven minutes, and met an Italian drone.

This has been a hard spring on bees, but they are doing well now. For the last week they have been working on white clover. I have had only two swarms as yet—on June 1 and 13, and one that came to me the first week in June. I hived and fed them, and they are working nicely.

A good many bees starved this spring. Some bee-keepers lost half the bees they had. I did not let any of mine starve. I

fed 6 or 7 ponnds of sugar syrup to each colony after fruit-bloom. It was too cold and wet.

I have some of my bees in chaff hives. They are the best. A neighbor gave me a colony on Sept. 15, 1891, which I transferred, and gave him all the honey. I wintered it on sugar syrup all right, and it is working strong to-day.

Ridgeway, O., June 20, 1892.

The "Walk-Over" Foundation Fastener

J. A. GOLDEN.

My apparatus (the "walk-over") is cheaply constructed, as follows:

Take a board 2 feet 8 inches long, 7 inches wide, and saw a "boot jack" in one end 3 inches wide, and as deep as you like. Next take a board 18 inches long, and 5 inches wide, and mortise a slot 5 inches from one end, ⅜ wide, and 3⅜ long *crosswise* of the board. On the short end from the mortise nail on a spacing block 3¾ inches long by 3⅜ inches wide, and ⅞ inch thick, close to the slot. Below the slot, but even with it, nail on a section shelf 5 inches wide, and 2½ inches long. For braces or legs take strips 2 inches wide tapered to one inch, the wide end halved in each side of the "boot-jack."

A 2-inch deep box shelf is put in 10 inches below the base of the heating-plate, and a hole cut in the box to receive the bowl of lamp, and thus avoid an accident. On the right side of the lamp box is tacked a foundation box. Take a strip of tin 7 inches long, 1¼ inches at one end, and 2 inches at the other, bend so as to form a spout, tacking the narrow end on top of the further end of the "boot-jack," and one edge of the wide end on the front. Have under the spout a small tin cup made from an oyster-can, which receives any melted wax when operating. A melted plate 3⅜ inches wide, and 3 inches long, is placed on top at right angles, and held in place by two screws.

On the lower end of the short, or section-board, place two hinges, and put the board at its proper place by holding the hinges down with one hand, and moving the board back and forth on the heating-plate, letting the plate rub the upper side of the slot. Fasten the hinges, and put in a spiral spring 5 inches above the hinged end of the section-board; the spring forces the section-board from the heater. This completes the "walk-over" machine.

To learn to operate it, one has only to pick up a section with the left hand, and a starter with the right hand from the foundation box, placing section over the spacer, with the starter on the spacer near the bottom, slightly pressing with each thumb on the starter, when a slight push with the hand will bring the metal tongue through between the section and starter. The starter is dropped on the hot metal, the pressure is relaxed, the spiral spring throws back the section-board, the starter falls in place, and is fimly fixed to the section. The spacing block should be dampened occasionally, to keep the starter from sticking.—*Bee-Keepers' Review.*

Rational Don'ts About Bee-Keeping.

C. L. STRICKLAND.

Don't wait until a honey-flow is rapidly passing or gone, before you have your bees and surplus cases ready for business, then curse the bees or profession for being a delusion. Be on time always.

Don't fail to cut out all excess of drone comb, for drones are heavy consumers, and bring nothing in. A few hundred instead of thousands, will serve a large aptary. It costs as much to keep one drone as it does six workers. Beware.

Don't fail to have plenty of water, salt and pure, so arranged that the bees can get at it without drowning. Bees must have water in their breeding season, no matter what the cost is to them. Be merciful unto them, always.

Don't be rough in handling your bees, for that kind of treatment will make the gentlest bees on earth cross, sooner or later. Always be gentle to them.

Don't cultivate a slack system of management in the apiary. It has never been known to pay, but has cost the keeper many dimes, and hours of fearful suspense.

Don't fail to always have plenty of bees when the honey-flow is on hand. If you can never do this, the less money and time you waste the better for you.

Don't think for a moment that there may be no difference in the race of bees for business, beauty, prolificness and gentleness, as there is, and, if ignored, you make a sad mistake.

Don't under-estimate the great value of good worker-combs. They are a great agency in building up new colonies, extracting, etc.—*American Homestead.*

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
July 21.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec.. Steel Creek, N. C.

Aug. 17.—Wabash Valley, at Vincennes, Ind.
Frank Vawter, Sec., Vincennes, Ind.

Aug. 27.—Haldimand, at S. Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.

Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel,Wis.
Benj. E. Rice, Sec., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich.

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

White Clover Bloom is Plentiful.

The weather has cleared up here at last, and bees are working. My scale hive shows a gain of 10½ pounds in the last three days. The spring has been so bad that I will have to buy 2,000 pounds of honey to supply my trade. White clover is blooming plentifully, but bees are shy of it, so far.

F. H. RICHARDSON.

Moberly, Mo., June 16, 1892.

Are Italian Bees Hybrids?

I wish to call attention to the article of Mr. Kildow, on page 291 of the BEE JOURNAL for March 17, 1892. He refers to three apiarists who claim that Italians are hybrids. If my authority tells me rightly, neither Mr. Kildow nor the three apiarists mentioned have ever been in Italy. Why did he not refer to persons who have traveled in Italy, such as Messrs. Benton and Dadant? Of course, Mr. Alley is traveling in Africa, by proxy, after the Punic bee, and he might have traveled in Italy in the same way. Mr. Kildow says that the 3-banded bee is the lowest type of the Italian. How does he know this? Also, will he please tell us something about the four and five banded bees, and from what strain they originated? It is true that they never originated in Italy, but in America. THOS. JOHNSON.

Coon Rapids, Iowa.

White Clover in Abundance.

We have about 30 colonies of bees here, but on looking them over about ten days ago, we found them entirely without honey excepting 2 colonies. We fed them at once, and since then the clover has come forward in abundance, and the bees have been busy enough. I am sick at home at present, but improving. I have had more solid comfort in reading the BEE JOURNAL than in any other one thing. THOS. B. NICHOL.

Pickering, Mo., June 18, 1892.

Bees and Cherry Blossoms, Etc.

"The proof of the pudding is in the eating." Our neighbors that have no bees, have no cherries this year. We have a nice lot of cherries set, and look for a good crop. The bees were having a good time working on the blossoms. This is one case where I know that the little bees did well, instead of harm.

As I was looking at the bees one noon, I saw a nice-appearing bee trying to fly. On examining it I found that its two fore-legs were held tightly to its body, as though paralyzed. What is the trouble? Can some one suggest the cause? ERNEST GUNN.

Wall Lake, Iowa.

Queens Piping a "Trio."

In May I bought a colony of black bees in a box-hive. From May 28 to June 8 there was little or no honey being gathered. On the night of June 6 I heard three queens "piping" at the same time, singing, as it were, a "trio"—soprano, alto and bass. On the next day the drones were carried out some from their cells. The song of the virgins were kept up on the night of June 7 and 8, and on the morning of June 8 I found

in front of the hive a fine virgin queen dead. The next day a large swarm came out. I was greatly interested in the song of the "three little maids just from school," and sat by the hive for more than an hour, dreaming of the mysteries of bee-life. Perhaps Dr. Miller will favor us with what he "*don't* know," and Mr. Doolittle with what he "does know," as to the cause of this, I believe, unusual occurrence. I put the swarm on the old stand. The old hive is on a new stand, and the unhatched drones are strewn thick in front of the same. GEORGE F. EVANS.

Martinsburg, W. Va., June 14, 1892.

Small Yield of Honey so Far.

The yield of honey in this section of the State (I do not know how it is elsewhere in the State) is almost a total failure. I have done as well as any one, I believe, and my yield from 300 good and strong colonies was only 175 gallons of honey. I am really sorry I extracted any at all, although I left them all they could possibly need. We are in hopes, however, should we get sufficient rain, to have a flow in July and August, as well as in the fall. I am pleased to learn from the columns of the AMERICAN BEE JOURNAL that the prospects are so flattering over the country generally.

JNO. W. OGLESBY.

Uvalde, Tex., June 18, 1892.

Black Bees or Italians—Which?

Which are best—blacks or Italians? This question is often discussed without taking into consideration the most important points. The Italian bees are no doubt greatly superior to the blacks in regard to gathering honey and defending their stores. There is a very marked difference in their favor in poor seasons. Even the hybrids seem to do as well as pure-bloods in gathering honey. But it is useless for a person to undertake to keep Italians if his neighbors keep ten times as many blacks within a mile or two of his apiary. His stock will run more or less to hybrids, even with great watchfulness. This will render them vindictive toward all animal creation as well as mankind. They not only sting at every opportunity, but are always watching for the opportunity. To sum the matter up, either keep the kind of bees your neighbors do, or else get them to keep the kind you intend to keep.

J. H. ANDRE.

Lockwood, N. Y.

Bees are Improving the Time.

We think that Prof. Cook "hit the nail square on the head" when he said, on page 773 of the BEE JOURNAL for June 9, that it was good weather for ducks. We had only four days in May that the bees could work, and June has been a little better, but the forepart of the month was bad. When the apples and cherries were in blossom, the bees got hardly any honey from them; but they are having a very good time now, getting honey from raspberries and blackberries, and also wild thorn-apples. The weather has been very rainy and very warm; it has been as high as 96° in the shade, but the sun has shone part of the time, and the bees made good use of it. N. B.

New Cassel, Wis., June 20, 1892.

Suffering from Rheumatism.

We have taken the AMERICAN BEE JOURNAL for 7 or 8 years, and would not like to do without it when we are taking care of bees. My husband had *La Grippe* about the time Mr. Newman had it, one year ago last winter. It left Mr. Beeson with rheumatism, in a very bad form. We then lived in Loveland, Colo., and had 140 colonies of bees, but my husband became so bad with the rheumatism, that we leased our bees for two years, and came to a warm climate, and the hot springs, to see if he could get any help. He does not seem to be much better yet, and we will not stay at this place long. I hope my husband may soon get relief, and that we may again be able to take care of the bees.

MRS. A. BEESON.

Aqua Caliente, Ariz., June 15, 1892.

Not Bumble-Bees—Severe Tornado.

On page 742 of the BEE JOURNAL for June 2, Mr. T. C. Kelley wants to know what kind of bees I have, and rather intimates that they may be "bumble-bees." I will say they are mostly Italians, and some hybrids, and the statement I made in the BEE JOURNAL was true in every particular, with the exception that I found 2 colonies queenless a few days afterward. Now, for the proof: I have not lost a colony since by spring dwindling, although on May 19 and 20 we had a snow-storm which lay on the ground one foot in depth after it was done falling, and some of it lay in front of my bees just one week before it was gone. In 35 days from May 9, they

were at work in the sections, and one colony was ready to swarm in 37 days from May 9. On June 14 we had a tornado, which uncapped 22 colonies, and blew 5 hives off from the stands, and they went end over end. I then realized one more of the benefits to be derived from a fixed frame, of which I am a firm advocate. Not one queen was killed, but I think a good many of of the bees were blown out of the hives, and some were caught in the storm and killed by the hail. Maple trees 18 and 20 inches in diameter were snapped like pipe-stems, and over 300 were blown down in the sugar-orchard.

M. F. CRAM.

West Brookfield, Vt., June 20, 1892.

Prevention of Swarming, Etc.

My bees are flying finely to-day. I have 40 colonies, 30 of them being very strong. Some are working in the sections nicely. I see described many ways to keep bees from swarming, but no perfect way yet. I clip my queens' wings so that I can catch them and put them back. I take out one frame of brood and replace it with an empty comb. I have been successful so far. I get from 75 to 150 pounds of honey per colony, and leave a plenty to winter on. My frames are 12x12 inches. I use 8 of these in the brood-chamber, which is about 13 inches square. I have two tiers of sections on each side of the brood-nest, and a case with 33 sections. I can tier up if I wish. I leave the space of one set of sections as a dead-air chamber. I think this is the best hive for comb honey that can be made. I have used it for four years.

G. I. WOLF.

Young America, Ind., June 13, 1892.

Storing Honey Rapidly, Etc.

My bees came out of winter quarters in splendid condition, having lost none through the winter or spring. They were so full of young brood that I fed 40 pounds of sugar syrup after fruit-bloom until white clover became plentiful. They are getting lots of honey, having the brood-frames full of honey and young bees; they are now storing in the sections. I have crates that have 20 pounds of honey in them. Isn't that pretty good for the five-banded golden Italians, after such a hard spring and winter?

I winter my bees on the summer stands, and have succeeded splendidly so far. I have 22 colonies of bees; I try not to get overstocked with bees—24 or 25 colonies is all I try to winter. I sell all the swarms I get over that number. The black bees are nearly all dead; they did not gather enough to winter on, and so they starved. I have not heard of one colony of Italians starving this spring, or the past winter. The five-banded golden Italians are good enough for me; they are pretty gentle, and good workers.

I received a sample of bees from Mr. G. M. Doolittle a few days ago, which were very nice. I would not want nicer-looking bees; and I am sure they are good workers, for I have the same kind.

Don't put your bees in an old straight hive, or place the hives against an old fence where you will not be able to see them once a week; neither put them in a lot where the grass and weeds will get higher than the hives. Don't grumble when you go out to mow around the hives if you get stung, for you ought to get stung if you keep bees in such a place. Don't complain if you get no honey in that way, for you ought to keep your bee-yard like a good wife keeps her house.

R. D. DAVIS.

Commercial Point, O., June 20, 1892.

Not Now Overstocked with Bees.

I spent the past winter rambling in the South. I lost two-thirds of my bees in trying to winter them on natural stores of poor honey, and we had a wet, cold spring. My neighbors have lost nearly all of their bees, and given up the field to me, so I now have just the opposite of a year or two ago, when the field was overstocked with bees.

JNO. D. ADAMS.

Nira, Iowa, June 18, 1892.

"**Hunger** makes honey of molasses," we read recently somewhere. We don't object to having honey *made* in that way, though we think that the saying is more imaginative than practical. We dislike the idea of *bees making* honey, but if "hunger" makes it, all right. We know that hunger will do almost anything, when thoroughly starved. Of course, the idea of hunger making honey is altogether poetical and harmless.—*Exchange.*

AMERICAN

ESTABLISHED IN 1861

OLDEST BEE PAPER IN AMERICA

BEE JOURNAL

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1A2t L. J. CLARK, Wiscoy, Minn.

WANTED—Everybody to send me 10 cents in exchange for my little book, "The A B C of Ferret Culture." It tells all about the care and management of this little animal.
25Atf N. A. KNAPP, Rochester, Lorain Co., O.

NOW—if you want Pure Italian Queens, send for my price list. Send now.
H. M. STEPHENS,
1A4t Munden, Republic Co., Kan.

WANTED—Everybody to send for sample of the Thinnest and Best Surplus Foundation made—14 to 16 square feet to the lb.
24A4t W. H. NORTON, Skowhegan, Me.

WANTED TO EXCHANGE—My new price-list of Italian Bees, White and Brown Leghorn Chickens, White and Brown Ferrets, and Scotch Collie Pups—for your name and address on a postal card. N. A. KNAPP,
25Atf Rochester, Lorain Co., Ohio

HONEY AND BEESWAX MARKET.

CHICAGO, June 25.—Comb honey is dull and no demand. Selling finest grade white at 15c. With new crop prices will rule firmer. Extracted is scarce and in good demand at 7@7½c. Beeswax, selling at 26c.
S. T. FISH & CO., 189 S. Water St.

NEW YORK, June 25—No demand for comb honey excepting fancy white. Quite a stock on the market of off grades and buckwheat. New Southern extracted arriving and sells at from 70@75c. per gallon for choice; 65@70c. for common. Beeswax quiet but firm at 27@29
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., June 25—Demand light, supply ample. White comb, 10@12c.; amber, 8@10c. Extracted, white, 6½@7c.; dark, 5@6c. Beeeswax—Demand good, supply light; price, 22@26c. It looks as if old crop of comb will not be all sold before new crop is ready.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, June 25. — Demand is good for extracted, slow for comb. Supply good of all kinds, Comb, 11@14c. Extracted, 5@8c. Beeswax is in fair demand, at 25@27c. for good to choice yellow. Supply good.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, June 25.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6@7c.; buckwheat, 5@5½c.; Southern, 65@75c per gal.; Calif., 6½@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c more per lb. for extra select.
CHAS. ISRAEL & BROS., 110 Hudson St.

KANSAS CITY, Mo., June 25.—Old honey is cleaned up, both extracted and comb. New crop will be in abont July 10, here.
HAMBLIN & BEARSS, 514 Walnut St.

DETROIT, June 25.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.
M. H. HUNT, Bell Branch, Mich.

CHICAGO, June 25—Very little choice comb on market; demand equals supply; sells at 13@15c.; dark, 10@12c. Extracted, very scarce; good demand; white sells at 7@8c., dark, 6@7c Beeswax is plentiful, fair demand, 25@26c.
J. A. LAMON, 44-46 S. Water St.

MILWAUKEE, June 25—Demand very moderate, supply average of all grades but common quality. Best 1-lbs. 15@16c; common, 12@13c. Extracted, white, in barrels, 7c.; in kegs, 7½c; in pails, 7½@8c. Beeswax—demand fair, supply small. Price, 23@28c.
A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO, June 25.—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax—24@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street.

NEW YORK, June 25—Demand is light, and supply large, except buckwheat comb. We quote: Fancy white comb, 12@14c; buckwheat, 9@11c. Extracted—Clover and basswood in good demand at 6½@7c; buckwheat ind emand at 5@6c. Beeswax in fair demand at 26@28c.
F. I. SAGE & SON, 183 Reade St.

CHICAGO, June 25.—Selling slowly, trade being in strawberries and other small fruit. No fine comb honey on the market—it would bring 15@16c. Extracted, 6, 7 and 8c., according to quality and kind. Beeswax. 27c.
R. A. BURNETT, 161 S. Water St.

BOSTON, June 25.—Demand is light. White 1-lbs., 13@15c. No 2-lbs. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.
BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS, MINN., June 25.—Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.
STEWART & ELLIOTT.

ALBANY, N. Y., June 25.—Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.
H. R. WRIGHT, 326-328 Broadway.

NEW YORK, June 25.— Demand moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 120 Pearl St.

Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

We Club the AMERICAN BEE JOURNAL and the monthly "Illustrated Home Journal" one year for $1.35; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for $2.10.

The Honey-Bee; giving Its Natural History, Anatomy and Physiology. By T. W. Cowan, editor of the *British Bee Journal*, 72 figures, and 136 illustrations. $1.00. For sale at this office.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

The Busy Bees, and How to Manage Them, by W. S. Pouder. Price 10 cents. For sale at this office.

ONE DOLLAR PER YEAR.

Club Rates.—Two copies, **$1.80**; 3 copies, **$2.50**; 4 copies, **$3.20**; 5 copies, **$3.75**. Mailed to any addresses.

THOMAS G. NEWMAN, GEORGE W. YORK, } EDITORS.

Vol. XXX. July 7, 1892. No. 2.

EDITORIAL BUZZINGS.

Women are angels here below,
For man's blessedness given;
Their smiles of joy, their tears of woe,
Bless as they shine, pain as they flow—
They are creatures born of Heaven.

Mr. F. C. Morrow, of Wallaceburg, Ark., has sent us a sample of Italian queen-bees with attendant bees, which are quite yellow and nice.

Women Bee-Keepers of the State of Illinois are requested to send their names and addresses on postal cards to Mrs. Thos. F. Gane, 425 La Salle Avenue, Chicago, Ills., saying that they are bee-keepers. Mrs. Gane is Vice-President of a woman's organization connected with the World's Fair, and desires to get statistics on bee-culture, poultry-raising, or any other semi-agricultural pursuit in which women are interested.

Warned Against Small-Pox—We have received from the Illinois State Board of Health a letter calling attention to the recent cases of small-pox in New York, Chicago, and Pittsburg, and suggesting that rigorous precautions be at once taken to prevent any further outbreaks. The communication recites the fact that an epidemic whould result in great loss. It includes by insisting on the rigid enforcement of the vaccination ordinances as a means of prevention.

The Board of Health at Springfield, Ills., will furnish, throughout the State, carefully selected, reliable vaccine at actual wholesale cost, accompanying each package with plain, practical instructions for the operation. To communities unable to purchase vaccine, if any such there be, it will be furnished gratuitously on proper representation of the facts, and an agreement to report results on the blanks furnished by the board.

Self-Hiving Arrangements are receiving much attention by progressive bee-keepers now-a-days, and they will doubtless receive a great deal more before they are made to do perfectly the work for which they are intended. Mr. C. H. Dibbern, in the *Western Plowman*, writes thus of his efforts to improve and perfect the device for the self-hiving of swarms:

During the present season we are in hopes of perfecting the self-hiver, so that it can be used without much after manipulation. We believe that we now have it so that this can be accomplished, but one can never be sure until it has been in actual use. Somehow the bees have decided notions of their own, and will often persistently refuse to do the very thing we think they ought to do. We shall try all the different plans that have been suggested during the past winter and spring; but we are very sure that some of the devices will not work at all. We shall do our best to perfect our own device, and now confidently expect to give something definite in a very short time.

Comb-Foundation Makers.—A letter of correction and apology is received from Prof. H. W. Wiley, Washington, D. C., June 27, as follows:

EDITORS AMERICAN BEE JOURNAL,

Dear Sirs:— In the list of manufacturers of comb and comb foundation published in Bulletin 13, Part 6, page 866, is included the name of Thomas G. Newman & Son, Chicago, Ills. I regret that anything we have published should do any injustice to any person or firm, by making any statement concerning that which is not true.

The AMERICAN BEE JOURNAL of May 26, page 696, says that Thomas G. Newman never manufactured an ounce of "comb" in his life, or even comb foundation. According to this statement his name should not have been included in the list, and I am sorry it was done.

The information on which his name was included in the list is found in the AMERICAN BEE JOURNAL May, 1890, page 175, and is entitled, "Advance in Price of Comb Foundation," which says, "On and after this day the price of comb foundation is advanced 5 cents per pound, both wholesale and retail, on account of the scarcity and consequently enhanced value of beeswax." Signed: "Chas. Dadant & Son, Thomas G. Newman & Son."

The AMERICAN BEE JOURNAL of June 4, 1890, page 14, under the head of "Beeswax Wanted," occurs the following: "We will pay 24 cents per pound in cash for yellow beeswax delivered here." Signed: "Thomas G. Newman & Son." It appears that we were justified in including Mr. Newman as a manufacturer, by the language of these two advertisements.

There was no intention whatever of doing Mr. Newman an injustice, and therefore I beg you to insert this article in your columns. I am, Respectfully,

H. W. WILEY, *Chemist.*

With pleasure we publish the foregoing explanation and apology, and are indeed glad to know that Prof. Wiley intended no injustice in the matter.

We showed the above letter to Thos. G. Newman & Son, and as they desired to say something further on the subject, we publish their comments as follows:

It is needless to say that we are glad to see the foregoing apology. In further explanation, we would remark that on page 696 it was asserted that Prof. Wiley's official pamphlet was "full of blunders and misrepresentations," and in proof of this, the fact was cited that, on page 866, in a "list of Manufacturers of Comb Foundation," such extensive manufacturers as A. I. Root and J. Van Deusen & Sons were entirely omitted, while Thomas G. Newman & Son (who are only dealers, and not manufacturers), are included.

As neither of the proofs cited above contain one word about the *manufacture* of comb foundation or anything else, the Professor was certainly *not* "justified" in his assertions.

But we are glad to learn in his last paragraph that the Professor had "no intention whatever of doing Mr. Newman an injustice." Had this matter been the only thing to complain of, no further notice would be taken of his unfortunate blunders. We hope that he will now correct all the other inaccuracies and misrepresentations, which abound in the pamphlet, many of which were pointed out on pages 696 and 697 of the AMERICAN BEE JOURNAL.

THOMAS G. NEWMAN & SON.

Patent Bee-Hive Men are again on the road. Mr. Wm. Housel, of Wertsville, N. J., writes us as follows concerning a certain hive being sold in his neighborhood:

Please answer through the BEE JOURNAL, whether there is a patent on a beehive called the "Burheim hive." There has been a man convassing and selling rights through this part of the country, and a great many persons have bought of him. WM. HOUSEL.

We know nothing of such a hive ever being patented—at least we never have seen any record of it. It is always safer to buy and use only such hives as are endorsed by practical apiarists.

In Going Over the July magazines, all Western readers will turn at once to Franklin H. Head's article on "The Heart of Chicago," in the current *New England Magazine.* It shows the metropolitan characteristics of Chicago as they have not been shown before; and its contemporaneity is the best record of the city's progress. It is finely illustrated by J. O. Hatfield, Charles H. Woodbury, and others.

Kind Words from our old friends and co-laborers are not only very encouraging, but are fully appreciated as well. We are not entirely out of the work, but are released from some of the arduous labors which have for years been wearing upon our constitution. The following, from a few of our most intimate friends, are prized beyond utterance:

MY DEAR OLD FRIEND:—With the change of firm name, it seemed as if my old friend Newman had gone away off, and I didn't feel quite reconciled to it. For so long a time we had worked and counseled together, and I had never felt afraid to express my inside thoughts, knowing that we were both working honestly for whatever might be best for the fraternity, and that everything I said would be honestly interpreted. Still, I am glad you can throw some of the care off your shoulders, and I am glad to have one like friend York take up the burden. Blessings on you.

C. C. MILLER, M. D.

Marengo, Ills.

FRIEND NEWMAN:—It is with regret that I learn that through ill-health you have found it advisable to sell out your interest in the AMERICAN BEE JOURNAL. Yours has been a long service, well done, and you retire with the best wishes of a vast circle of friends, earnest and appreciative.

I hope that you may be yet spared many years to aid us by your pen, by your cousel, and by your interest in our pursuit. Few, indeed, could have labored with so unselfish purpose in the interest of bee-keepers as you have done for the many long years I have known you. You will have *your reward* for these years of earnest labor, and when the great future unfolds the new life, there will be hosts of warm friends to congratulate you, as well as hosts on this side of life to appreciate and profit by your long and faithful labors.

My best wishes will ever go with you, as one of my best and truest friends.

G. L. TINKER, M. D.

New Philadelphia, Ohio.

FRIEND NEWMAN:—I learned with regret that the state of your health was such that you were obliged to give up the helm of the AMERICAN BEE JOURNAL. I know you must regret it also, for the AMERICAN BEE JOURNAL is really your "adopted child." When you took hold of it, it was a babe in swadling clothes, and puny enough at that—so puny, in fact, that if the life you instilled into it, had not given it fresh vigor, it would have died long ago. I began it with the late Mr. Wagner, dropped it for about a year, and have kept with it since about the time you took it. That it has done well, there is no need for me to say to you. Its manly, independent tone has endeared it to the heart of every bee-keeper of consequence. I only trust that Mr. York will keep it up to the mark and condition in which you have left.

Please accept my best wishes for your future, and allow me to express the hope that you will soon recuperate, and get back as near to your former condition of health as may be expected in your older years. For I can see that while age may give discretion and judgment, it wears terribly on the "narves." The *Home Journal* is work enough for you. May your lives run in pleasant places, is the wish of JOS. E. POND.

North Attleboro, Mass.

As intimated by Brother Pond, the *Home Journal* will furnish all the employment I should have, and hereafter my energies will be devoted to it. My health has improved since the vacation I took, and the subsequent disposal of the AMERICAN BEE JOURNAL. By lessened care and labor, fewer hours at my desk, and more spent in the open air, I hope to recruit and be more like the former THOMAS G. NEWMAN.

Bees and Grafting-Wax.—Mr. Henry Wilson, of Clinton, Ills., on June 25, 1892, wrote as follows about bees stealing grafting-wax, the subject of Query No. 824, which was published with answers on page 828 of the BEE JOURNAL for June 23, 1892:

To keep the bees from stealing the wax from grafts, wrap any kind of paper around the wax when freshly put on, so it will stick. Thin paper is better than thick, and it should be white, so the wax will be cooler. I have had the bees to take it off only one season, but I always wrap the grafts, as it is a great benefit to them, even when the bees do not touch the wax.

My bees have done nothing this season so far. HENRY WILSON.

The Pure Food Bill, which is now before Congress, should receive the hearty support of all who favor everything pure and undefiled, especially when it comes to what we eat. Mr. John H. Larrabee, Field Agent of the Michigan Agricultural College, and experimenter in bee-culture, wrote us as follows, on June 29, in regard to bee-keepers helping to make the Pure Food Bill a law:

DEAR EDITORS:—I enclose a form of a letter that may, with justice and propriety, be sent by every reader of the AMERICAN BEE JOURNAL to his Representative or Senator in Congress. Should one-half of the subscribers of the AMERICAN BEE JOURNAL mail such a letter to their Representatives, it would without doubt prove a powerful lever in securing the passage of this law. It is not a political Bill—it can scarcely be made such. Its provisions are wholesome and needed. It will help all political parties alike, and will harm only those engaged in wrong-doing. During this year of political excitement, such a letter would have unusual weight. Let us all unite in our own business interests on this matter. J. H. LARRABEE.

The following is a copy of the letter mentioned by Mr. Larrabee in the foregoing, to be mailed to your Representative and Senator at Washington, D. C.:

DEAR SIR:—I understand that the Paddock Pure Food Bill is before Congress. May I urge upon you to support it in the interests of, and in justice to, the producers of honest food? Bee-keepers all over the land are much interested in its passage, and regardless of party, urge its justice, and the need of it. Please consider your interests, and the interests of the people you represent, and, so far as you can, consistently and honorably, use your vote and influence in this good cause. I am,

Respectfully yours,

Now, let all who read this, write out the above sample letter, and mail it *at once* to their Representative, and also to their Senator, in Congress. Do not delay this important matter, but do it *now!*

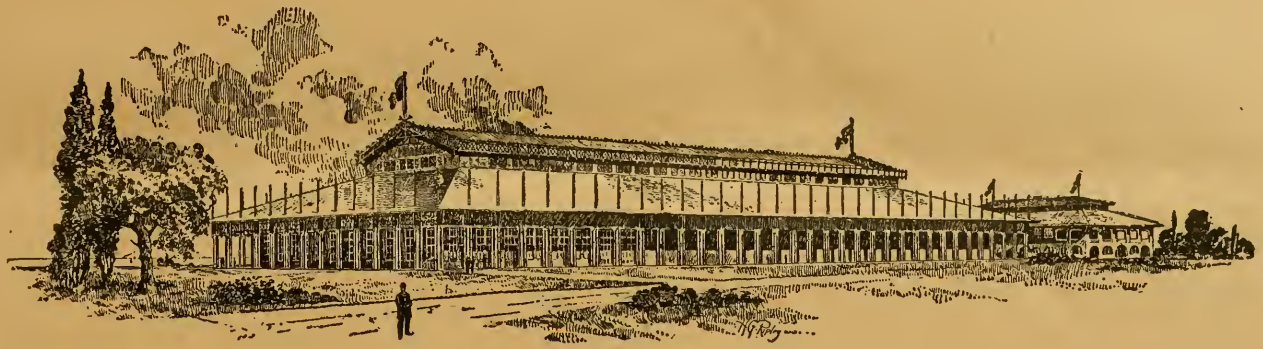
This Bill is of great interest to bee-keepers, and our pursuit will be greatly benefited thereby. Honey adulterators, as well as all others of the nefarious class, will be discovered and brought mercilessly to justice, and the public protected from the diabolical practice of unscrupulous and depraved specimens of mankind who live and fatten by deception and fraud. Bee-keepers can help to down these infamous parasites of humanity, by compelling their political representatives to carry out the will of their constituents, or take the consequences. Write to them *now!*

Bees from India are likely to be imported soon, now that the Government has begun to take an interest in the matter. We hope that the article on page 47, by Mr. Frank Benton (who is now employed by our Government at Washington), will be read by all. Bee-keepers, as Bro. Root has well said, "owe a vote of thanks in advance to Prof. C. V. Riley and Hon. Edwin Willits, and congratulate them on being able to secure the services of so experienced a man for the work as Frank Benton." All will await with much interest the results of the experiments on the part of the Government in our behalf, and hope that much practical benefit, as well as scientific knowledge, may come from such an effort.

Not to Belong to a Woman's World's Fair committee is now regarded by titled and aristocratic European women as a positive lack of distinction. Indeed, the interest in the Exposition displayed by prominent and influential women in most of the European countries, is truly remarkable. The exhibit of woman's work is sure to be very comprehensive and complete, and, it is believed, surprising. Good for the women!

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 37.

THE WORLD'S FAIR FORESTRY BUILDING.



The Forestry Building is in appearance the most unique of all the Exposition structures. Its dimensions are 200 by 500 feet. To a remarkable degree its architecture is of the rustic order.

On all four sides of the building is a veranda, supporting the roof—which is a colonnade consisting of a series of columns composed of three tree-trunks each 25 feet in length, one of them from 16 to 20 inches in diameter and the others smaller. All of these trunks are left in their natural state, with bark undisturbed. They are contributed by the different States and Territories of the Union and by foreign countries, each furnishing specimens of its most characteristic trees.

The sides of the building are constructed of slabs with the bark removed. The window frames are treated in the same rustic manner as is the rest of the building.

The main entrances are elaborately furnished in different kinds of wood, the material and workmanship being contributed by several prominent lumber associations. The roof is thatched with tan and other barks.

The visitor can make no mistake as to the kind of tree-trunks which form the colonnade, for he will see upon each a tablet upon which is inscribed the common and scientific name, the State or country from which the trunk was contributed, and other pertinent information, such as the approximate quantity of such timber in the region whence it came.

Surmounting the cornice of the veranda, and extending all around the buildings, are numerous flagstaffs bearing the colors, coats-of-arms, etc., of the nations and States represented in the exhibits inside.

QUERIES AND REPLIES.

Standard Grades for Comb Honey.

Query 826.—1. Is it desirable and feasible to have standard grades for comb honey? 2. If so, how many grades 3. Epitomize your idea regarding it, if possible.—Randolph.

No.—MRS. L. HARRISON.

I am not competent to answer the above questions.—M. MAHIN.

1. Yes. 2. Not more than about three grades.—C. H. DIBBERN.

1. Yes. 2. Three grades. 3. "Fancy," No. 1 and No. 2.—H. D. CUTTING.

I think it will be hard to get a set of grades to suit all locations.—E. FRANCE.

3. It is hardly possible. Most bee-keepers will follow their own inclinations.—G. M. DOOLITTLE.

See late numbers of the various bee-periodicals. I have my doubts. Men differ so much.—A. J. COOK.

1. It would be very desirable, but exceedingly difficult to perfect a plan that would suit all locations.—J. P. H. BROWN.

1. Yes. 2. "I don't know." 3. I don't want to. I havn't time to fool away on something I know so little about.—A. B. MASON.

We fear it will be difficult to come to an understanding. We are willing to accept what the majority may wish as standard.—DADANT & SON.

1. It is feasible, and perhaps desirable. 2. About five, as follows: Fancy, No. 1 White, No. 1 Amber; No. 2 White, No. 2 Amber.—R. L. TAYLOR.

1. Yes. 2. Two. 3. So much has been written upon this subject recently, that I should not feel justified in taking space here to repeat it.—MRS. J. N. HEATER.

1. It is desirable, whether feasible or not. It is feasible, too, I think. 2. As few grades as possible. 3. This matter has already been discussed fully in the bee-papers.—EUGENE SECOR.

2. I would have but two grades. 3. The finely capped combs with best quality of honey should constitute 1st grade. All other combs should go into 2d grade.—G. L. TINKER.

1. It is certainly desirable, and I think feasible. 2. I don't know. It will take some discussion to decide. 3. Have grades independent of color or quality, and then add the latter.—C. C. MILLER.

1. Yes. 2. I think four are all that are desirable. 3. My ideas on the subject have been given already in the various bee-periodicals too fully and frequently to repeat them here.—JAMES A. GREEN.

1. No. Honey is a *natural* product, and I protest against the thoughtless attempt to put honey on a level with the painted trash of the dishonest adulterators. Nature alone can grade honey.—G. W. DEMAREE.

1. Yes; and also to keep the honey well up to that grade. 2. I think three, though more may perhaps in some cases be advisabic. 3. 1st grade, the finest; 2d grade, good, but with some imperfect cells, and a little discolored; 3d, dark, though clean.—J. E. POND.

1. I think that the person running machinery is the one to improve it, as well as the manufacturer of machinery; so I would refer you to some of the large dealers in comb honey. 2. From my judgment, I would say three grades 3. I do not feel able to abridge the idea.—MRS. JENNIE ATCHLEY.

I have given this lately-agitated subject no thought. I would imagine, however, that different bee-keepers would have about 20 different grades in each "grade," so that, after all, no one could tell where one grade left off and another began. The buyers must fix grades in their minds, and they grade our honey themselves, the same as wheat, etc.—JAMES HEDDON.

1. Yes. 3. Where every section is perfect, call it "Gilt Edge;" where a little at variance, call it No. 1. Rough and partially filled, stained, etc., No. 2; always naming the kind of honey in connection with the grade. For instance: Should your honey be clover, grade it as gilt-edge clover honey; No. 1 clover honey; and No. 2 clover honey. With other kinds, let them be graded likewise.—J. M. HAMBAUGH.

1. Yes. 3. Grade according to the rules of the North American Bee-Keepers' Association. Two grades of white honey, one of mixed (light and dark), including fall flowers, which is almost always mixed with early honey, and one grade for buckwheat honey. Good, pleasant flavor, of course, is always un-

derstood with white honey. The Western member of the Albany committee did not meet with us, and I have been informed since that very large quantities of yellow or saffron colored sealing is produced in the prairie States. If so, it may be necessary to make another grade for this. The small quantity usually produced in the East, can be put into the mixed grade.—P. H. ELWOOD.

It is both desirable and feasible to grade comb honey, and standard "rules" should be agreed upon, and generally adopted. We fully believe in the rule of the majority. The united wisdom of those in attendance at the North American Convention temporarily settled upon "Rules." These are being discussed, and, as a result, will be reviewed at the next meeting, and then should be everywhere acknowledged and used.—EDITORS.

Milk-Weed and Pleurisy-Root.—Mr. L. Posey, of Torch, Ohio, sent us some flowers to be named, and wrote concerning them as follows on June 25, 1892:

I send you a spray of flowers which I would be pleased to have named. I have 6 colonies of Italian bees, and they are doing a big business just now on this same flower, and, strange to say, I cannot find a solitary *black* bee working on them, although there are quantities of blacks right close to my Italians. Can you offer any cause why this flower seems to be the exclusive property of the Italians? My Italians in dovetailed hives are doing splendid work this season; three of them have 48 sections nearly sealed with white clover honey. Almost all the bees in this neighborhood are blacks, in box-hives, consequently I have no opposition in producing honey.
L. POSEY.

We sent the flowers to Prof. T. J. Burrill, of the Illinois State University at Champaign, Ills., who wrote us as follows about them:

The two specimens inclosed are red milk-weed, *Asclepias incarnata*, and yellow milk-weed, or pleurisy-root, *A. tuberosa*. These flowers are bad traps for black bees, for by their peculiar structure the tongue of the bee gets caught in a slit, and the death of the insect is often a consequence. Italian bees seem to be strong enough to escape, though these do occasionally get fastened in a similar way. Sometimes numerous dead bees can be found on the flowers, or near by. Do they learn to avoid the flowers, as Mr. Posey's observations seem to indicate?—T. J. BURRILL.

The World's Fair grounds and buildings, now nearing completion, are so renowned as a most beautiful and interesting spectacle that not only do from 5,000 to 12,000 people a day, at a cost of 25 cents a piece, inspect them, but the great majority of travelers who pass through Chicago devote a day or more to the same purpose. Hundreds of distinguished foreigners, and thousand of prominent men from the various States of the Union have availed themselves of this privilege, and it is not exaggeration to say that all, without exception, have been most agreeably surprised at the splendor and magnitude of what they witnessed, and have departed very enthusiastic over the bright prospects of the Fair. Several hundred of the returning delegates of the late Republican national convention at Minneapolis, inspected the wonders of Jackson Park while in Chicago. Nearly all of the delegates to the Democratic convention at Chicago have done the same. The Exposition authorities have committees to show visitors about and explain details to them.

The Paper Trade Club of Chicago, representing nearly all the paper manufacturers of the city, is arranging for an interesting display at the World's Fair. The club expects to put a complete paper mill on the grounds, and show the process of making paper from the pulp to a finished card in the shape of a World's Fair souvenir.

The Globe Bee-Veil, which we offer on the third page of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, with $3.00.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Swarming—Its Cause and Control.

BY "MALTA."

There is no doubt that where kept in modern hives, and treated with scientific appliances and care, bees swarm much more frequently than when in their wild state. Many causes have been assigned, and reasons given for this, and many plans suggested for preventing or controlling it; but, to my mind, the one and principal cause of swarming *at all* has been too much overlooked.

Over-crowding, want of space, etc., are, I believe, quite secondary causes; for cases are common, where no lack of room exists, such as when a colony is established in a roof, while a colony in a crowded hive does not always swarm; and the chief, in fact ONLY cause is *the approaching exhaustion of the queen's power to lay fertilized eggs;* the natural desire or instinct to increase the number of families only serving to guide the bees in their method of procedure.

It is a well known fact that the queen's limit of producing fertilized eggs depends entirely upon the power and virility of the drone with whom she mates. Cheshire says the spermatozoa yielded by a drone are probably not more than 4,000,000; Leuckart says 25,000,000; other good authorities vary between these, but whoever is right the fact remains that the rate of expenditure of these fertilizing threads, and not the number of years a queen can live, is the measure of the limit of time during which she is of use in the hive, and shortly before that is reached, she must be replaced.

That swarming is more frequent in the cultivated state, than in the free and wild state, proves that this exhaustion is the sole cause of swarming, for while in a state of nature, the queen works at "high pressure" only at certain periods, such as the opening of spring, or when a big honey-flow is on, probably for a month or two at the most; the rest of her time is "under easy steam," and as every economy is practiced, she continues fit for work for three, four, or even five years; but under the guiding hand of man a different routine obtains; he, by means of extra quilts, warmth, early stimulative feeding, ready-built-out combs, brood-spreading, etc., keeps her at "high pressure" for about seven months, "forcing" her without ceasing, or rest, the result being that she becomes rapidly exhausted as regards fertile egg-laying, and after about one year is not fit for much more work.

The colony knows when this state is reached, whether after one or five years' service, and at once decides that she must be replaced by a younger and more capable mother. I maintain that this is done by *supersession, and by supersession only;* but before doing this, instinct teaches them that the duty of increase has to be carried out, and can only be done by swarming for which they immediately prepare. By the time the new colony is established, combs built, stores provided, eggs in all stages, and young hatching, the old queen is quite exhausted; she is then turned out, and a young one reared to take her place.

I feel certain that in every case of a swarm issuing, the old queen is quickly made away with very soon after the new colony is in working order, and if the combs on which a swarm has been hived are examined late in the season, one or two old queen-cells will invariably be found, which can only mean supersession.

Again, when a queen begins to fail, she begins to lay drone-eggs—a young fertile queen never does. The presence of many drones is a sign of imminent swarming, and many drones can only be produced by a failing queen, or, in other words, swarming becomes imminent as the queen becomes exhausted, and only at such a time.

A swarm frequently builds large quantities of drone-comb, which is generally accounted for by saying the bees are getting so much honey, and have so little expenditure that it is to economize wax and time. No! a bee is not so improvident as to build, from laziness, what will in the future be a nuisance—it is a matter of necessity. The queen is nearly exhausted, and lays drone-eggs more and more freely every day; these must be accommodated, hence the drone-comb. When she is gone, and no more drone-eggs are produced, then, and not until then, will these cells be found filled with honey; for the young queen has no use for them.

I am further led to the conclusion that approaching exhaustion of the queen's fertility is the only cause of swarming, by my experience with different races of bees, and different climates. In those

races where the drone is small, swarming is more frequent; but if a queen of such a race is mated with a larger and more powerful type of drone, the resulting stock will run longer without swarming; also, that if "forcing" in any form occurs, either by artificial means or by reason of a climatic lengthening of the working season, so surely does swarming occur at shorter intervals.

It will also account for many of the vagaries of bees, such as a so-called "hunger swarm;" this is only that from some reason swarming at the right time was delayed, but at last the queen is found so exhausted, that it is "now or never." Nature will not allow "never," so it must be "now"—bad as the time may be.

"Swarm from a swarm" is another case. From some secondary cause—say over-crowding—the swarm has issued before the queen was ripe for supersession, so has been allowed to go on, but now her time has come, and the law must be obeyed—increase before her destruction. Late and untimely swarms are due to this cause entirely.

Having thus arrived at the true and sole cause of frequent swarming, the prevention or control is not such a difficult problem: 1. Re-queen frequently, and before the signs of approaching exhaustion show strongly. 2. Take every precaution in rearing not only queens, but the drones with whom they have to mate, for upon the male depends entirely the length of time the queen is of use in the hive, which undoubtedly determines the tendency to swarm.

Panama.

A Colony of Bees Under the Ground.

L. J. CLARK.

On June 6, I took up and transferred to a frame hive, a wild swarm of bees found by an old man while looking for a place to quarry rock. The tree was a burr-oak, and stood on a steep side-hill in a little hollow that had been washed out by the water—it was at least 200 feet up from the valley, and stood all alone unprotected by other timber, and on the west side of the hill at that. I mention these things because this tree was the best I ever took up in the spring, and I have taken up more than 100 of them altogether.

The bees were in the root, and went in at least a foot below the ground on the lower side of the tree; the water had run over a root and washed the dirt and stone away, while on the upper side the dirt was 2 feet higher than the entrance. All the brood was below the top of the ground, and most of the honey. They had apparently been there for several years, were very strong in bees, with queen-cells started, also a large amount of drone-brood nearly ready to hatch, and about 40 pounds of fine honey. They would have swarmed within ten days. I have the bees now in my yard, and better workers I never saw.

Now, the past was a very hard winter and spring on bees here (many bee-keepers have lost all), and why this colony should be in such prospercus condition in that bleak, exposed situation, is more than I can explain, unless it was because they were below the top of the ground. The cavity where the brood was, was about 12 inches in diameter, and about the same in height, when it run up the tree about two feet, in two forks, which then came together again. These forks were not more than 3 inches irregular diameter, and the upper cavity some 6 inches one way and 3 the other, by 12 inches high. The whole was packed full of comb, all empty except close to the brood.

Wiscoy, Minn., June 16, 1892.

Importing the Great Bees of India.

FRANK BENTON.

I have been requested to furnish information regarding the truth of a report recently circulated by the newspapers, to the effect that the Government intended to undertake the importation of the Giant East-India bee, *Apis dorsata*, and that this work was to be entrusted to be. I have deferred somewhat my compliance with the request, hoping later to be able to give definite information—in fact, to be able to say that this work, whose accomplishment has been so long desired by the bee-keepers of both Europe and America, would be undertaken; when the work would be entered upon; and how we proposed to accomplish it. I regretted the appearance of the newspaper reports referred to. They were premature, and wholly unauthorized by myself or any one connected with the Division.

Something over a year ago Dr. C. V. Riley, United States Entomologist, first addressed me in regard to the Government work in apiculture, supposing at

the time that I was still abroad, and that he could secure an authorization for me to proceed to India after *Apis dorsata*, which, he stated, he was very desirous of importing into this country. His letter passed me in mid-ocean, for, after a long self-imposed exile, I was on my way to my native land. It finally reached me in western New York, whither I had gone. We had considerable correspondence about the matter, and, as I learned afterward, it was Dr. Riley's intention to have me endeavor to introduce some other desired insects at the same time. Thus, he had assured prominent fig-growers of California that he would make every effort possible to introduce caprifig insects, which are necessary to the pollenizing of the Smyrna fig, this valuable variety not being productive in California solely for want of such distribution of its pollen. He was also quite anxious to introduce certain parasites of well-known injurious insects which have been imported without their natural checks.

Difficulties unforeseen by both Assistant Secretary Willits and Dr. Riley made the postponement of this work imperative. But the subject is again under consideration, with a much better prospect than heretofore that Dr. Riley's desires in this direction can be carried out. This does not, of course, mean a certainty, but merely that the chances are now good for its accomplishment. They will be enhanced if bee-keepers and apiarian periodicals make known their desire to see the experiment tried.

I believe the experiment of introducing *Apis dorsata* is worth trying. Mr. Dathe, the only practical bee-keeper besides myself who has visited India in search of *Apis dorsata*, and who followed, in his efforts to introduce this bee into Europe, exactly in my footsteps, agrees with me in the desirability of testing this giant bee. Indeed, at the Frankfort *Wanderversammlung*, where I met him, he proposed to me that we should make the third effort together. Yet I should not like to have any one entertain such great expectations regarding these bees as to cause him to be disappointed if the experiment should not result in all we hope for.

At present the whole undertaking must be viewed *strictly in the light of an experiment*, from which it is, however, *possible* we may obtain important practical results, and *highly probable* that the direct practical results will at least be sufficient to prove the wisdom of such an expenditure on the part of the Government, though private parties attempting it could hardly hope to recover the cost. In any event, a more extended investigation of the bees of the far East than I was able to make during my stay in India, is greatly to be desired.

How frequently far greater sums of money have been granted to fit out expeditions to go to distant parts of the earth to make observations during an eclipse or transit of some heavenly body, the main object of which might be to determine whether the sun or some star is more or less distant from the earth than was generally supposed! And how often almost the whole benefit to result from such an undertaking depends upon as slender a chance as the presence of clear weather during the few minutes' time the phenomenon lasts! It is far from my purpose even to hint that such work is not valuable, for it adds to the sum of human knowledge; and often the most abstract and apparently useless information proves of great practical use to the world. But I wish to point out how much greater reason there is for attempting work such as the investigation of these Eastern honey and wax producers—work which, viewed abstractly, has a value equal to such undertakings as have been mentioned, and which, at the same time, promises to add another source to our national wealth. And the interest in our pursuit which this work will arouse, when done under the auspices of the National Government, will not fail to rebound to the advantage of apiculture.

RESULTS FROM THE UNDERTAKING.

A brief statement of the results which it is hoped might be brought about through this undertaking, will be of interest to all bee-keepers.

1. It is hoped *Apis dorsata* may be domesticated and kept in hives in a manner similar to our ordinary bees; and that this large bee, having a tongue longer than that of ordinary bees, will be able to secure the honey from various blossoms—notably those of red clover—from which our bees get little or nothing. Also, that they will at the same time aid in the fertilization of these blossoms, so that better seed, and more of it, will result, especially in the case of the first crop of red clover produced when bumble-bees are not numerous.

2. An effort would be made to produce and test various crosses between *dorsata* and *mellifica*. If such crosses can be obtained, possibly something more valuable than either of these bees would

result. One is led to think of this by the fact that drones of *dorsata* do not differ greatly in size or general appearance, though somewhat in habit, from ordinary drones.

3. Even if *Apis dorsata* should not prove valuable in domestication, there seems to be no reason why it should not, if introduced and set free in our Southern States, produce there, as it does in the forests of India, great quantities of honey and wax, the latter product (derived almost wholly from *Apis dorsata*) forming an important article of export from India.

4. We may hope to bring to this country *Apis indica*, a bee smaller than our ordinary honey-bee, but an industrious gatherer, which, in quite limited numbers, is kept in hives by the natives of India. It might be found that *A. indica* would visit only smaller flowers than our bees, and thus, even if kept in the same fields, not lessen the yield we obtain from the races already here. It would be no small gain for the apicultural interests of the country if three apiaries could be kept at one point without material interference with one another.

There is also in connection with this undertaking much other work from which we have reason to expect important results. Of this, information will be given in due time. I have no desire to arouse hopes that might prove ill-founded, and thus bring only disappointment.

AN ERROR CORRECTED.

In conclusion I wish to ask the indulgence of my readers to enable me to correct an error connected with the subject, but the original source of which I do not know. It first appeared long ago, and has been repeated frequently—even in books on bee-keeping. I refer to the statement that "the first expedition after *Apis dorsata* cost Mr. D. A. Jones, of Canada, a small fortune," and that in this undertaking I "was the agent of Mr. Jones." The facts are, the expedition cost less than $1,000; I was in partnership with Mr. Jones in this work, and it cost me just as much as it did him; moreover, as Mr. Jones did not go to India, but was in Canada at the time, I had the hardships of the work, and the illness which followed my exposure in the jungles, to bear.—*Gleanings.*

Washington, D. C.

Be Sure to read offer on page 37.

Cortland Union Bee-Keepers' Convention.

C. W. WILKINS.

On Tuesday, June 14, the bee-keepers and those interested, ladies as well as gentlemen, met with their President, Mr. J. L. Kinney, 2½ miles northwest of Cortland Village, N. Y.

A very pleasant time was enjoyed in informal discussion and apicultural conversation until lunch was announced. After a most excellent repast, to which all did ample justice, the meeting was called to order by the President.

The report of the Secretary was read and accepted; also the Treasurer's report, likewise.

Opportunity was then given, and responded to, for members who were not present at our January meeting, to pay their annual dues.

ITALIANIZING AND INTRODUCING.

Discussion was then opened by the question, "What is the best way to Italianize 50 colonies of bees?" It was generally decided that the purchase of one or more pure queens from some reliable breeder, each year or two, would give the apiarist stock from which he could introduce queens to his colonies which were deficient in blood with less pecuniary output than any other method.

C. M. Bean, of McGrawville, remarked how apt our black queens were to live and undergo all manner of hardship, while the yellow queens, which we all so much admire, so easily "come up missing."

It was unanimously decided that the proper way to introduce an expensive queen was to place her in a nucleus of brood and young bees, when you run scarcely any risk of losing the queen.

The question, "Is it any sign that a colony has a poor queen, because they are weak at this time of the year?" received considerable interesting and spirited discussion, but the most weighty points seemed to be in the negative.

A canvass was made among the members to ascertain the loss in bees during the past winter and spring. It has been a very severe loss in this section. Out of a fall count of over 800 colonies, an average loss of 23 per cent. was realized.

Discussions and remarks were next in order, for determining where we should hold our August picnic. It was finally decided to have it at the Floral Trout Park, Cortland, N. Y., the date to be fixed by the committee.

President Kinney appointed as committee to boom the picnic, the following with their wives:

Messrs. J. H. Kennedy, Cortland; J. H. Manchester, Preble; M. H. Fairbanks, Homer; Miles Morton, Groton; C. M. Bean, McGrawville; George Green, Dryden; and Marvin R. Wood, Cortland.

The convention then adjourned to meet in a short session at the annual picnic. C. W. WILKINS, *Sec.*

Visits Among Iowa Bee-Keepers.

THOS. JOHNSON.

As mentioned in last week's BEE JOURNAL, I was visiting at Denison. About 11 a.m. I went 15 miles east of Denison to West Side, where I found what bees there are in and around the town in good condition, considering the cold spring. The place being more on the highlands, caused a better circulation of air, so that mold and sour stores are not frequently met with, as in the lowlands along the river.

Now I wish to call the attention of the readers to what I discovered at Logan, what some bee-keepers call "spring dwindling." In visiting one apiary I noticed that the owner was taking too much care of his bees, by protecting them from cold air, etc. His yard was arranged so that it could be closed when the wind blows; secondly, all evaporation was gathering on the top, causing great quantities of water to gather, and causing mold, and diseasing his bees in such a way that the poor creatures wanted fresh air, but daring not to make a circulation of air by using their wings, on account of chilling the brood. The bees would venture out, and the result would then be spring dwindling by mold and sour honey, on account of not having proper ventilation.

While at Dow City, one man said it was caused by honey-dew. In looking around I saw that his honey extractor was full of what he called "honey-dew." It looked more like heart's-ease honey than anything else—at any rate nine-tenths of it was granulated. Our experienced and well-informed apiarists say that honey-dew is a secretion of insects; if such is a fact, who ever heard of such secretion granulating, with a liquid covering it?

So much for the learned apiarist at Dow City. My opinion on most of his loss was on account of meddling with his bees in cold weather, and not having their honey capped. At 6 p.m. I left the place and went to Arcadia.

The next morning I visited the firm of Pruter & Wunder, and I found that the bees in and around the town are doing well, and the loss will not reach 10 per cent., as far as heard from. This information was derived from different bee-keepers of the surrounding country inquiring for bee-supplies.

I saw Mr. H. F. Radden, who had a few colonies, with no loss up to that time. Arcadia and the surrounding country are settled by Germans, and the farmers have just started in the bee-business. Bidding my German friends adieu, I next visited Carroll, which is a railroad town; I call it one of the liveliest places in Western Iowa, for its age. It sprung up about 25 years ago, and has 2,500 population. Not finding any bee-keepers, I left at 3 p.m., and went to Glidden, where I met some old-time friends. Mr. D. N. Smith has a few colonies, having just started in bee-keeping. Mr. J. M. Campbell, the bee-man, had a "queen" up in the post-office that I would rather associate with than the ones in his bee-yard. Mr. G. M. Thorne had 30 colonies, and lost 7 by smothering. Mr. G. W. Hill had 15 colonies, and lost 3 on account of lack of stores. I made a personal examination of Mr. Thorne's bees on April 15, and know whereof I speak.

The loss in Glidden township did not exceed 10 per cent., and all the loss was caused by carelessness in not having sufficient stores and proper ventilation.

I next went to Scranton City, Greene county. In the morning I met Scott Barker and John Garland, they having a great many bees, but their loss will not exceed 5 per cent., spring count. Mr. D. R. Ansden lives one mile west of Scranton City. I intended to visit him, but time would not permit. Mr. A. lives in Carroll county, and is County Supervisor. I learned that his bees, as well as those of other bee-keepers, are doing well, considering the cold, backward spring.

I left at noon for Jefferson, the county seat of Greene county, a railroad junction, with a population of 2,000. Here I met John Dodge, sheriff-elect, who had 10 colonies last year, and obtained 12½ pounds of surplus honey per colony. His loss from Nov. 24, was 5 per cent. Also Mr. Samuel Wise, City Marshall, had quite a start in bees, and his loss will be

50 per cent. or more. In and around Jefferson, the loss in bees in the fall will not be far short of 50 per cent.

I left Jefferson the next morning, and went to Panora; here I met some prominent bee-men, and I found by careful inquiry that the loss would be nearly 50 per cent., cause by lack of stores. Bees are not bred up here very much, as I found only one Italian colony among all I saw.

At 5 p.m. I went to Yale, six miles north of Panora, at one time the county-seat of Guthrie county. Here I found the bees doing better on account of their being on higher ground, where the air has better circulation in the apiaries. I remained all night with Mr. C. G. Pierce, proprietor of the hotel.

At 11 a.m. I arrived at Herndon, and from there I went to Jamaica, three miles east. Mr. B. O. Witter, of that place, obtained 40 pounds of surplus honey from 7 colonies. Quite a number had started in bee-culture here. The loss in the vicinity is counted at 50 per cent., and if all the bee-yards look like the ones I examined, it is a great wonder they have any bees left. I had dinner with Mr. J. C. Tompson, an old acquaintance. I then took the 5 p.m. train for Perry, Dallas county, a place of 3,000 inhabitants. I called on Mr. J. H. Shively, and found that bee-keepers in that neighborhood were somewhat discouraged, not having taken much if any surplus honey last year, and the loss in wintering was 30 per cent.

The next morning I intended visiting Jesse White, Thos. White, and John Flinn, but when I arose, it was raining so hard that it was uncomfortable to travel, and would have been dangerous to undertake examining bees; so at 12:55 p.m. I took the train for Coon Rapids, arriving home at 1:40.

I looked at my yellow bees, which are the best honey-gatherers that we have in western Iowa, and found that during all my travels, of about six weeks, I had not lost a colony. What is the reason? First, because they are of the best honey-gatherers, from the best queen-breeders I could select. Secondly, I did not meddle with them in cold weather. Third, I examined them and gave them stores where such was needed. I am proud of my 60 colonies of bees, which are in four different yards.

I now bid the readers of the BEE JOURNAL adieu for awhile, especially as regards the description of travels, as my bees will require my attention.

Coon Rapids, Iowa.

The Dibble Self-Hiving Arrangement.

WESLEY DIBBLE.

I use the James Heddon bottom-board and stand, ½-inch rim on bottom-board, except the front, and 2-inch on side corner. The front I use perforated metal to confine the queen on the combs, and allows the bees free access to the hives; and it furnishes no roosting-place for bees to cluster in the shade. The 2-inch space is furnished with a button which closes this space when the trap is not in use. This trap hangs on the bottom-board by tacking a strip of tin 3 inches long on each end. On the trap is a similar tin which shoves behind, and firmly holds the trap to its place. I use either trap as a queen-catcher, or to hive bees automatically. As a queen-trap I use it as shown, closing the outlet. As a self-hiver, connect the outlet of the trap with the adjoining hive; prepare the hive with one dry comb, if convenient.

Even though I have worked hard, and have been determined to get an even full-sized swarm every time in the empty hive, I have not accomplished the object. Yet with this trap, and the man who tells you he can with any trap, it will probably pay you to investigate a little before investing largely. I speak now of hiving on the side. The results I get will vary from one pint to a full-sized swarm going with the queen to the new hive. I don't care which when I use the extra hive. I generally use it for increase; and when I find a swarm of bees that has swarmed in my absence (prepared as above), I shake as few or as many bees with the new swarm as desired, and remove the old hive to a new and permanent location.

This work can be done at any time, from one hour to four days, usually. It must be done before the young queen hatches. If you are a farmer, mechanic, doctor, or preacher, do it any time you have the time to do it.

This arrangement furnishes me positive proof that my queens are cared for, and not returned to the hive to be killed, which will often happen. It furnishes me instant proof that this colony of bees has swarmed, and needs attention. Without extra labor I can pass down a row of hives, and each hive tells its own story. You have noticed, probably, that a newly-hived swarm of bees works with a will that you will seldom see at any other time; and if I had the time, and not too many bees, I would hive all of

my bees by natural swarming, and use the old hive as a feeder to the new one by setting it on one side, in such shape and form as to cause the field bees to return to the old home. I think that no other management will produce better results for surplus honey, and little or no increase.

Please allow me to go back a little to the upright trap (described last week), and say that, if you want a full-sized swarm up-stairs with the queen, without any assistance, use the bottom-board between the two hives only, and a hole or a connection in it with perforated metal tacked on. An inch hole is sufficient. If you want everything in bees up-stairs, put a bee-escape in place of the metal. Every bottom ought to be supplied with vent for air, and so arranged as to close when not wanted.

I have studied days and weeks and nights to perfect a trap, or traps, that would allow me time to care for bees from home. I expect to keep right on studying.

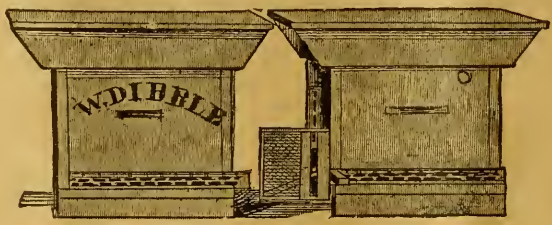
I don't want it understood that I care for my different yards of bees alone, and allow my bees to swarm to their heart's content. No, sir; I don't do it.

It may be a little new, perhaps, but I am preparing now, ready for use, a comb-receiver for every hive of bees. I hang it on the side of an eight-frame hive, with openings between it and the brood hive, so constructed that it is open for queen, bees and all to pass in either apartment, or perforated metal, to separate queens only. If more than one, or close, it entirely separates the comb-receiver from the hive.

I use this comb-receiver for the following purposes: As a feeder, a nucleus hive supplied with bees from the same colony, attached to it or any other. My queens are all mated from them. Every strong colony is a nucleus; every nucleus is a strong colony of bees, using it at any time or all times when wanted; and when you do not want them any more, the bees belong to that colony. It needs no extra preparation for uniting or building up nuclei.

I use it to prevent swarming, by taking the comb the queen is on, bees and all, in the receiver when the colony is preparing to swarm; and I hold her there until I care to return her to the colony she came from, or any other.

I use it to introduce queens, or supersede any queen I wish to dispose of. No time is lost in egg-laying; no queens are lost in introducing. If for want of time, or I cannot find the queen when exchanging the queen to the comb-receiver, or any other carelessness or absent-mindedness, I am arranging for such emergencies to let the traps return the queen to the receiver. Either trap will do it; and when I have an out-yard marked to return in four days, I know everything is all right. I can sleep better by knowing it. I know this location. Everybody ought to know his location well enough to know when to expect honey, and about when to proceed as above. At times, when only occasionally a swarm issues, let the trap do the work; time is money, and bee-keepers must adopt new methods if they succeed at the present price of honey.



The Dibble Automatic Swarmer.

Bee-keeping is the most enticing business I know anything about; and I have never known a genuine bee-man to give up the business, who ever succeeded in anything else. He is spoiled for any other occupation.

I received a patent May 3, 1892, for my side trap; patent applied for an upright trap and other things connected with it. When these traps get clogged with hundreds of dead drones, clear them. Several swarms at one time will often all unite and cluster together.

I hear of heavy losses of bees all around me. My loss is less than 3 per cent. Young queens out mating will often lead swarms off.—*Gleanings.*

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
July 21.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec., Steel Creek, N. C.

Aug. 17.—Wabash Valley, at Vincennes, Ind.
Frank Vawter, Sec., Vincennes, Ind.

Aug. 27.—Haldimand, at S. Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.

Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel, Wis.
Benj. E. Rice, Sec., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich.

National Bee-Keepers' Union.

PRESIDENT—James Heddon..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

SELECTIONS FROM OUR LETTER BOX

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Working on the White Clover.

Bees are booming on white clover, but there has been little swarming so far.

H. H. BROWN.

Light Street, Pa., June 24, 1892.

The Apiary Ground, Etc.

On page 832 of the BEE JOURNAL for June 23, Mr. S. C. Booher asks how to keep an apiary yard free of grass, and mentions a cement floor. Such a yard would be extremely hot, and no doubt it would have some influence towards starting the vice of absconding, which, at times, renders apiaries nearly worthless. Moreover, bees will be less profitable if the colony is overheated. I should prefer the most pleasant lawn that could be produced, instead of heated cement, coal-ashes, or barren ground of any kind, even if a queen was lost occasionally.

Mr. B. is also quite right in regard to taking bees from the cellar too early. They should not be placed on the summer stands until there is plenty of pollen to gather.

J. H. ANDRE.

Lockwood, N. Y.

Expects a Good Fall Crop.

I have 44 colonies, but they are very light in bees. I had one swarm on June 25. It is so wet here. I look for a good crop of fall honey.

E. S. HOVEY.

Swanton, Iowa, June 27, 1892.

Great Crop of White Clover.

My bees have not done much on account of the wet weather. There is a great crop of white clover, and if the weather is favorable, I think the prospects will be good for a honey crop. I had one very large swarm on May 6, and one on May 18. I use the Tinker hive, which, I think, is the best hive made for comb honey. I had one colony of Italian bees in a Tinker hive last season, and took from it 61 pounds of comb honey.

N. W. SHULTZ.

Shreve, Ohio, June 26, 1892.

Swarm-Catchers—Prosperous Season.

I notice on page 806, that Mr. Henry Durham, of Indiana, claims to have made and used a swarm-catcher two years ago, that has been patented by a bee-keeper in Minnesota a few weeks ago. I do not think that the latter can claim priority of invention. I also made and used the same swarm catcher two years. I have had three of them in use in my apiary since June, 1890, and now have five. Mine was not exactly the same shape, but it covers all the claims that the one just patented can claim. It does not appear to me that the patent is valid. I have had some experience in patents, and if I understand the patent law rightly, it does not allow patents to be issued on any article that has been in use for two years, or more, by other parties. I am prepared to show, beyond a doubt, that I have made and used this same invention for two years, and I presume that Mr. Durham can show the same thing.

I had intended to describe my swarm-catcher in the BEE JOURNAL, and give

my fellow bee-keepers the benefit of its use, without having any royalty attached thereto. I hope this will meet the eye of some one who is prepared to answer whether any one can slip into the Patent Office and put a clincher on an article that his neighbors have had in use for two years or more; then turn around and charge three or four prices for it.

The swarming season is just at hand, and the bees are generally in fine condition. The fruit-bloom is now past, and the white clover never showed up any better than it does now, for this time of the season. Everything now points to a prosperous season for the Minnesota apiarist. C. H. POND.

Kasson, Minn., June 20, 1892.

An Experience in Shipping Bees.

In May I sent to New York State for a nucleus colony and queen; they came all right, until they got to this end of the route, and some one cut a hole in the screen, and let most of the bees out. I was at the express office when they came, and one of the train men said there was a few bees in the car. I set out not to take them, and make the express company pay for them. It was very hot, the depot master was away, and his son was left to see to things. If I left the bees they would have to be shut up in a small room all night, and I pitied them, so I paid the express charges on them, and took them home. By taking extra care of them, I shall have a fair colony by fall. The wire was cut with a knife about three inches long, and a piece of paper stuck on with wax to keep the bees in that had not not escaped. CHARLES E. HOLLEY.

West Farmington, Me., June 25, 1892.

Italian Bees in Combs of the Blacks.

On page 638, of the BEE JOURNAL for May 12, Mr. J. M. Pratt says: "I believe the cause of much dissatisfaction with the Italian bees is, that bee-keepers buy queens of some good breeder, and introduce them to colonies of black bees, and the queens are forced to lay in cells built by the black bees, which are too small for pure Italians. Of course, the bees will then be no larger or better than the common blacks."

Mr. Pratt seems to think that the black bees are the smallest, but I think that he is wrong. If he will examine both the Italians and blacks, when they are not loaded with honey, he will find that the blacks are slightly larger than the Italians. The Italian bees have larger honey-sacs than the blacks, and of course they will seem larger when loaded, than the blacks, when, in reality, they are smaller. I do not think that breeding Italians in comb built by the blacks can make them any smaller, or, in other words, prevent them from getting their full growth, unless the comb is too old. ED. CLARK.

Nat, Ala.

Winter Losses and Honey-Dew.

Bees nearly all died in this section last winter. One man near Burlington had about 50 colonies last fall, but has only two left this spring. Out of 30 colonies, I have only 7 left. Nothing but "honey-dew," and that as black as tar, to live on last winter. I think that was the cause of the great fatality.

I. P. WILSON, M. D.

Burlington, Iowa, June 27, 1892.

A Girl's Experience with Bees.

Bees wintered well in this part of the country, and did well until the middle of May, then starvation stopped brood-rearing, so the honey harvest will find many colonies short in bees. My father tried to keep the bees from swarming this spring, and has been successful so far; we have had only one swarm out of 160 colonies. We have about 30 or 40 colonies each with 32 one-pound sections in a super filled with white clover. To-morrow linden begins to bloom, so the bees may get part of a honey crop yet; however, we do not expect as much as in some other years. My father is very busy this spring, and I have to do the largest part of the work with the bees. He gives me orders in the morning about what has to be done, and looks over the work in the evening to see if the work is done right. We fill the supers, and prepare everything for the bees in the winter months, but still it keeps a little girl busy to attend to 160 colonies. Last year we had 240 colonies, and I had to do about all the work alone. LOUISE SCHUMACHER.

Weston, Mo., June 27, 1892.

When You Have any honey to sell, get some Honey Almanacs and scatter in your locality. They will sell it all in a very short time.

COMBED AND EXTRACTED.

Caring for Empty Combs.

In the shop cellar we nailed lath on each side of the joists, near the lower edge. On this lath we hung the frames. There not being room to hang them straight across, they were hung on a slant. About an inch space was left between them. If there was to be any great amount of jarring, they might not be very secure, as they have only the thickness of the lath, about ⅜ of an inch, to hang on; and, being hung on a slant, they will be more easily knocked down.

There are several advantages in having them hung up in this way. There is not so much danger of their being injured by mice; they are entirely out of the way, as they do not take up any available room, and are very easily got at when wanted. With a free circulation of air, and the coolness of the cellar, the worms will not get at them so early, nor work so rapidly. They are in such condition that they are easily examined, and we will keep close watch of them; and the first trace of worms that we see we will be on hand with brimstone, as they are in excellent shape to fumigate. It is important to take them when the worms are small; for after they are full grown, they will stand an immense amount of brimstone without seeming injury.

But there is one objection: The combs will not be nearly so nice and sweet as when kept by the bees, and, with any reasonable proportion between the bees and combs, I would much rather leave them to the tender mercies of the bees. —EMMA WILSON, in *Gleanings*.

"Who is My Neighbor?"

Any man to whom I can render a kindness is my neighbor. What can you do to help some one? Go and read to that old blind woman, and be sight to the blind. Seek out for yourself some work of practical mercy and help. Do not leave this to a "committee." The Good Samaritan didn't send a committee, he went himself. "Go and do thou likewise." Have you ever visited the hospital or the almshouse, or the prison? Have you ever felt in your heart the warm currents of blessing flowing in upon your soul, as in the name of Jesus you have helped some sufferer, or lifted some unfortunate one? Don't wait until Christmas, when there is a general outburst of benevolence. Seek out opportunities constantly.

There is a story told of a Russian soldier who, pacing his beat one bitter night, came across a poor man, apparently freezing to death. The soldier took off his warm overcoat and put it on the poor man. The soldier sometime afterwards died. Appearing in heaven, he came before his Saviour, who, to his intense amazement, was clad in his overcoat. "You've got my coat on," said the soldier. "Yes," said the Saviour, "you gave it to me that bitter night. Inasmuch as ye did it to one of the least of these, my brethren, ye did it unto me."—REV. A. W. PATTEN, in *Epworth Herald*.

A Russian Honey Drink.

Mr. Wm. R. Ebell, a Russian by birth, has bought 40 acres of ground about three-quarters of a mile outside of the city of Kendallville, Ind., and is making a great effort to establish a colony of Russians. The plan is to carry on all kinds of work and manufacturing. In this manner all the members of the colony will have employment. The part that interests us most is that he is brewing a Russian drink, which is made principally from honey. It is a very popular drink in his country, and used in large quantities. It is kept in public places, and sold about as we sell soda-water in this country. He has already received several barrels of honey.

We think the new honey fresh from the flowers and hives, containing all of its flavor and odor, full of strength, having lost nothing by standing and candying, would make the best drink. We have advised him to buy direct from the bee-keepers when he can get it, sometimes, and especially this time of the year, not a week old. What kind of honey will be the best for the business has not been determined yet. That used in Russia was "strained" honey, very strong, and of all kinds, but we ought to be able to furnish each kind separate. Let him experiment and find out which is best for this purpose. It looks as though this enterprise would use up a large quantity of honey. The drink is not intoxicating.—*Bee-Keepers' Guide*.

Don't Fail to read all of page 37.

AMERICAN BEE JOURNAL

ESTABLISHED IN 1861 — OLDEST BEE PAPER IN AMERICA

PUBLISHED WEEKLY BY

GEORGE W. YORK & CO.,

At One Dollar a Year,

199 RANDOLPH ST., CHICAGO, ILLS.

TO CORRESPONDENTS.

The Bee Journal is sent to subscribers until an order is received by the publishers for its discontinuance, and all arrearages are paid.

A Sample Copy of the BEE JOURNAL will be sent FREE upon application.

How to Send Money.—Remit by Express, Post-Office Money Order, or Bank Draft on New York or Chicago. If none of these can be had, Register your Letter, affixing Stamps both for postage and registry, and take a receipt for it. Money sent thus, IS AT OUR RISK; otherwise it is not. Do not send Checks on Local Banks—we have to pay 25 cents each, to get them cashed.

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Subscription Credits.—The receipt for money sent us will be given on the address-label of every paper. The subscription is paid to the END OF THE MONTH indicated.

Do not Write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Emerson Binders, made especially for the AMERICAN BEE JOURNAL, are convenient for preserving each weekly Number, as fast as received. They will be sent, post-paid, for 50 cts. each. They cannot be sent by mail to Canada.

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The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year.

Lost Copies we are glad to replace, if notified before the edition is exhausted.

The Convention Hand-Book is very convenient at Bee-Conventions. It contains a Manual of Parliamentary Law and Rules of Order for Local Conventions; Constitution and By-Laws for a Local Society; Programme for a Convention, with subjects for discussion, and about 50 blank pages, to make notes upon. It is bound in cloth, and of the right size for the pocket. We will pre sent a copy for one new subscriber to the BEE JOURNAL, with $1.00.

An Apiary Register is a splendid book to have in an apiary, so as to know all about any colony of bees at a moment's notice. It devotes two pages to each colony. We will send one large enough for 50 colonies, for $1.00, post-paid; for 100 colonies, for $1.25; or for 200 colonies, for $1.50. After using it for one season, you would not do without it.

The Premiums which we give for securing new subscribers to the AMERICAN BEE JOURNAL, are intended as pay for *work done* in getting new names among your friends and acquaintances, and are not offered to those who send in *their own* names as new subscribers, unless such name or names form a part of a club of at least three subscribers.

A Binder for preserving the copies of the AMERICAN BEE JOURNAL as it arrives from week to week, is very convenient. You should have one, as it is so handy for reference from time to time. We mail it for only 50 cents, or will give it as a premium for two new subscribers, with $2.00.

When Talking About Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we offer some excellent premiums that you ought to take advantage of.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	*Club.*
The American Bee Journal	$1 00	
and Gleanings in Bee-Culture	2 00	1 75
Bee-Keepers' Guide	1 50	1 40
Bee-Keepers' Review	2 00	1 75
The Apiculturist	1 75	1 65
Canadian Bee Journal	2 00	1 75
American Bee-Keeper	1 50	1 40
Nebraska Bee-Keeper	1 50	1 35
The 8 above-named papers	6 25	5 25
and Langstroth Revised (Dadant)	2 40	2 25
Cook's Manual (1887 edition)	2 25	2 00
Quinby's New Bee-Keeping	2 50	2 25
Doolittle on Queen-Rearing	2 00	1 65
Bees and Honey (Newman)	2 00	1 75
Binder for Am. Bee Journal	1 50	1 40
Dzierzon's Bee-Book (cloth)	3 00	2 00
Root's A B C of Bee-Culture	2 25	2 10
Farmer's Account Book	4 00	2 20
Western World Guide	1 50	1 30
Heddon's book, "Success,"	1 50	1 40
A Year Among the Bees	1 50	1 35
Convention Hand-Book	1 25	1 15
Weekly Inter-Ocean	2 00	1 75
Toronto Globe (weekly)	2 00	1 70
History of National Society	1 50	1 25
American Poultry Journal	2 25	1 50
The Lever (Temperance)	2 00	1 75
Orange Judd Farmer	2 00	1 75
Farm, Field and Stockman	2 00	1 75
Prairie Farmer	2 00	1 75
Illustrated Home Journal	1 50	1 35
American Garden	2 50	2 00
Rural New Yorker	3 00	2 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Almost Every Bee-Book that is now published we mention on the second page of this issue of the BEE JOURNAL. Look over the list and select what you want. For every new yearly subscriber that you secure for us at $1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apiarian knowledge among your friends.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid little Dictionary—and just right for the pocket.

Premium to Every New Subscriber.—We will *give* to every new subscriber (with $1.00), for whom it is desired in place of getting any other premium we offer for work done, a copy of "RURAL LIFE"—a valuable pamphlet of over 100 pages, devoted to "Farm Topics, Live-Stock, Poultry, Bees, Fruits, Vegetables, Household, Home, and Miscellaneous Matter." Or we will send it, postpaid, for 25 cts. This is a rare chance for new subscribers to get some excellent reading for nothing—by sending $1.00 for one year's subscription to the BEE JOURNAL.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

JAP. Buckwheat, pkg. 6c.; bu. $1.20. Clover, Hives, Supplies, Queens, cheap.
1A2t L. J. CLARK, Wiscoy, Minn.

FOR SALE OR EXCHANGE—Italian Bees and Queens. Address, OTTO KLEINOW,
22Etf No. 150 Military Ave., Detroit, Mich.

WANTED—Everybody to send me 10 cents in exchange for my little book, "The A B C of Ferret Culture." It tells all about the care and management of this little animal.
25Atf N. A. KNAPP, Rochester, Lorain Co., O.

NOW—If you want Pure Italian Queens, send for my price list. Send now.
H. M. STEPHENS,
1A4t Munden, Republic Co., Kan.

WANTED—Everybody to send for sample of the Thinnest and Best Surplus Foundation made—14 to 16 square feet to the lb.
24A4t W. H. NORTON, Skowhegan, Me.

WANTED TO EXCHANGE—My new price-list of Italian Bees, White and Brown Leghorn Chickens, White and Brown Ferrets, and Scotch Collie Pups—for your name and address on a postal card. N. A. KNAPP,
25Atf Rochester, Lorain Co., Ohio.

HONEY AND BEESWAX MARKET.

CHICAGO, July 2. — Comb honey is dull and no demand. Selling finest grade white at 15c. With new crop prices will rule firmer. Extracted is scarce and in good demand at 7@7½c. Beeswax, selling at 26c.
S. T. FISH & CO., 189 S. Water St.

NEW YORK, July 2.—No demand for comb honey excepting fancy white. Quite a stock on the market of off grades and buckwheat. New Southern extracted arriving and sells at from 70@75c. per gallon for choice; 65@70c. for common. Beeswax quiet but firm at 27@29
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., July 2.—The old crop of comb honey is all cleaned up. First shipment of new comb honey this week, which we quote at 16c. for No. 1-lbs.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, July 2. — Demand is good for extracted, slow for comb. Supply good of all kinds, Comb, 11@14c. Extracted, 5@8c. Beeswax is in fair demand, at 25@27c. for good to choice yellow. Supply good.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, July 2.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6@7c.; buckwheat, 5@5½c.; Southern, 65@75c per gal.; Calif., 6½@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c more per lb. for extra select.
CHAS. ISRAEL & BROS., 110 Hudson St.

KANSAS CITY, Mo., July 2.—Old honey is cleaned up, both extracted and comb. New crop will be in about July 10, here.
HAMBLIN & BEARSS, 514 Walnut St.

DETROIT, July 2.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.
M. H. HUNT, Bell Branch, Mich.

CHICAGO, July 2.—Very little choice comb on market; demand equals supply; sells at 13@15c.; dark, 10@12c. Extracted, very scarce; good demaud; white sells at 7@8c., dark, 6@7c Beeswax is plentiful, fair demand, 25@26c.
J. A. LAMON, 44-46 S. Water St.

MILWAUKEE, July 2.—Demand very moderate, supply average of all grades but common quality. Best 1-lbs. 15@16c; common, 12@13c. Extracted, white, in barrels, 7c.; in kegs, 7½c; in pails, 7½@8c. Beeswax—demand fair, supply small. Price, 23@28c.
A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO, July 2.—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax—24@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street.

NEW YORK, July 2.—Demand is light, and supply large, except buckwheat comb. We quote: Fancy white comb, 12@14c; buckwheat, 9@11c. Extracted—Clover and basswood in good demand at 6½@7c; buckwheat ind emand at 5@6c. Beeswax in fair demand at 26@28c.
F. I. SAGE & SON, 183 Reade St.

CHICAGO, July 2. — Selling slowly, trade being in strawberries and other small fruit. No fine comb honey on the market—it would bring 15@16c. Extracted, 6, 7 and 8c., according to quality and kind. Beeswax, 27c.
R. A. BURNETT, 161 S. Water St.

BOSTON, July 2.—Demand is light. White 1-lbs., 13@15c. No 2-lbs. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.
BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS, MINN., July 2.—Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.
STEWART & ELLIOTT.

ALBANY, N. Y., July 2. — Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.
H. R. WRIGHT, 326-328 Broadway.

NEW YORK, July 2. — Demand moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7½@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 120 Pearl St.

Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

We Club the AMERICAN BEE JOURNAL and the monthly "Illustrated Home Journal" one year for $1.35; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for $2.10.

The Honey-Bee; giving Its Natural History, Anatomy and Physiology. By T. W. Cowan, editor of the *British Bee Journal*, 72 figures, and 136 illustrations. $1.00. For sale at this office.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

The Busy Bees, and How to Manage Them, by W. S. Pouder. Price 10 cents. For sale at this office.

ONE DOLLAR PER YEAR.

Club Rates,—Two copies, **$1.80**; 3 copies, **$2.50**; 4 copies, **$3.20**; 5 copies, **$3.75**. Mailed to any addresses.

THOMAS G. NEWMAN, GEORGE W. YORK, } EDITORS.

Vol. XXX. July 14, 1892. No. 3.

EDITORIAL BUZZINGS.

Jaunty plumes and nodding grasses,
Hum of bees and cannon boom,
Under dewy skies and starlit,
Booms that burst in fiery bloom.
Lilt of robin, blare of trumpet,
Brooklet's flow, and rocket's whiz,
You can guess without the telling
Just what merry month it is!
—Selected.

Great Britain has had an excellent honey season this year; at least it is so reported.

This Means You.—When ordering any of the books or articles which we offer clubbed with the BEE JOURNAL, or otherwise; or when sending anything intended for us, such as subscriptions to the BEE JOURNAL, or matter for publication, *be sure* to address everything to —George W. York & Co., 199 Randolph St., Chicago, Ills.

The American Bee-Keeper for July says: "It seems almost a certainty that a hard winter or spring, one during which there are heavy losses of bees, is followed by an abundant honey-flowing season. The previous two winters have been mild in most parts of the country, and consequently almost all bee-keepers brought their colonies through with little if any loss, and when the time for the expected honey-flow was at hand, everybody was ready with large and numerous colonies to gather it, but it came not.

"Clover, the past two years, has, in most localities, yielded but sparingly of its nectar. Last winter was not severe, but the past spring has been one of the most disastrous ones for bee-keepers that we have had in a number of seasons. Many colonies went into winter quarters with insufficient stores, and unless fed artificially, the long, wet spring was too much for them, and many dwindled away and died out completely, while hardly any came out strong and in good condition.

"The season has now advanced enough to cause us to feel confident it will be an exceptionally good one for those who have the bees to gather the honey."

By Return Mail — Beautiful Queens of the 5-banded variety. Don't miss this chance. One untested queen in July, $1.00; 6 for $5.00. August or September, 1 untested queen, 75 cents; 6 for $4.00. — J. F. Michael, German, Darke Co., Ohio.

Nearly One-Half of the bees, it is thought, were lost throughout the country the past winter and spring. What a fine chance for those that are left! Honey will be worth something this year.

You are Invited to send in something for publication from your experience, that may help your fellow bee-keepers.

The Bee-Keepers' Union has another "feather in its cap." It has won another victory without expense or effort. Mr. John F. Haeger, of Hill City, Tenn., on July 2, 1892, wrote as follows concerning the influence of the Union, and its effect upon a threatening neighbor:

My neighbor threatened to poison my bees with arsenic, because his grapes rotted this year, it being a rainy reason. I mentioned to him the consequences of bees putting arsenic and honey in the surplus cases, as consumers might die from its effects. I also explained to him the reason for the existence of the Bee-Keepers' Union, and convinced him of his folly. The next day he apologized. Stick another feather in the Union's cap! JOHN F. HAEGER.

After reading the above, and the many similar reports of the quiet but effective influence of a "standing army" of bee-keepers for their protection against threats and persecutions, we cannot understand how any apiarist can feel right while outside of the Bee-Keepers' Union. Send $1.00 for a year's membership to Thomas G. Newman, the General Manager, 199 Randolph St., Chicago, Ills.

Be Sure to read offer on page 69.

A Honey-Bee Enemy in California is mentioned in *Insect Life*. Specimens of the insect—*Hcteropteron apiomeris flaviventris*—have been sent to Washington for examination by the Entomological Division. Both the adults and the nymphs were seen feeding upon honey-bees in California.

Mrs. Jennie Atchley, who, among other prominent bee-keepers, answers queries in the BEE JOURNAL from week to week, is again sick, we are sorry to learn. Her many admiring friends will unite in the hope that she may soon be wholly restored to usual health and strength.

Small Bees.—Mr. W. C. Frazier, of Atlantic, Iowa, on July 2, 1892, mailed us a sample of some small bees, concerning which he wrote as follows:

I send you a sample cage of the smallest bees I have ever seen. As you will notice, they are pure Italians. All the bees from this queen are like the sample. W. C. FRAZIER.

Thinking that perhaps Prof. Cook might like to see the bees sent by Mr. Frazier, we mailed them to the Professor, who commented thus upon them:

The bees from Mr. Frazier are very small, though I have seen them equal in diminutiveness before, I think. If all are so, as I conclude may be the case from Mr. F.'s letter, it must be owing to some peculiarity of the queen. If only a part are so, which would be less strange, and which I judge may be so from the samples sent, then I presume it arises from being reared in old combs, which has been bred in so long that the cells are very small, and so the cramped quarters make the small bees.—A. J. COOK.

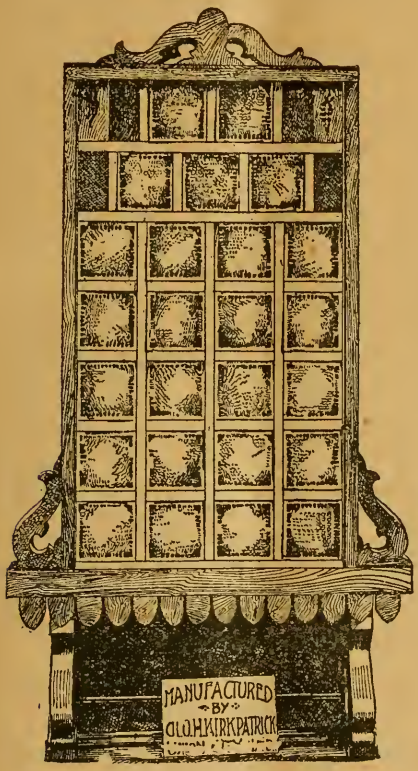
Experience in any line is a good thing to listen to, and especially is it true when considering the importance of successful advertising. Here is what a bee-supply firm says, that has spent lots of money in advertising their goods:

This is about the time a great many advertisers withdraw their advertisements until next season, thinking thereby to save considerable expense, but it is poor economy. Our experience is that an advertisement which appears every month in the year pays several times better than one which runs only during the busy season.

That firm has the correct idea about the matter. Bee-keepers may see an advertisement when reading their bee-paper months before the time when supplies are needed, and remember it when ordering goods; while during the busy season few apiarists have time to examine advertisements very closely. While it *pays* to advertise at *any* time, it *pays better* to advertise *all* the time.

Don't Fail to read all of page 69.

A Stand for Comb Honey exhibits at Fairs or other places is shown by the engraving below. It could also be used to advantage in every grocery store, to arrange the sections of comb honey in such a way as to call to it the attention of customers, thereby selling large quantities of honey, as nice comb honey needs but to be seen to insure sales.



Stand for Comb Honey.

Bee-keepers should be awake to the employment of every means to dispose of their crops of honey to the best advantage, and induce local grocers to put up such a stand as this to help in selling the product of the apiaries in their midst.

This stand, to show 25 pounds of honey in 4¼x4¼ sections, is about 2½ feet wide at the base, and 4½ feet in height; size of glass, 20x36 inches.

The Apiculturist for July is on hand, as bright and neat as a new pin. Bro. Alley has this to say about us in that issue, for which we extend thanks:

Brother Thomas G. Newman has been obliged to give up his connection with the AMERICAN BEE JOURNAL. Hundreds will regret his retirement. So far as the AMERICAN BEE JOURNAL is concerned, it seems to have passed into good hands, and the *Apiculturist* wishes Bro. York success in his business.

Mr. S. E. Miller, who now is one of the esteemed correspondents of the BEE JOURNAL, and who has long and ably conducted the Apiarian Department of the *Farm, Field and Stockman*, wrote as follows about the change in the management of the BEE JOURNAL:

With the first number of June, that "old reliable" authority on bee-matters, the AMERICAN BEE JOURNAL, passed into new, yet not untried hands. George W. York, for eight years Mr. Newman's able assistant, assumes control. Mr. Newman is retained as editorial father. All interested in the honey-bee and its work, will join with us in wishing Mr. York a long and prosperous voyage in the journalistic sea.

Good Wishes are always appreciated by the publishers of the AMERICAN BEE JOURNAL, and while we would like very much to record all of them from our thousands of well-wishers, we can only publish a few. The following is from J. M. Pratt, of Todd's Point, Ky., written when sending his subscription for another year:

I have been a reader of the AMERICAN BEE JOURNAL since 1877. I cannot be without it and keep bees. Often one article alone has been worth more to me than the price of the BEE JOURNAL for one year. While it has stood the test of age, it is always new, fresh and interesting every week. Our best wishes and hopes are that its continuation in the future will be as full of usefulness and prosperity as it has been in the past.

J. M. PRATT.

The Gossip is like the bee; there is always a sting in her tale.

Another Bee-Smoker improvement was patented on June 28, 1892, by Mr. Alanson G. Hill, of Indiana. It is patent No. 478,006, entitled "Bee-Smoking Apparatus." From the specifications received, we extract the following paragraphs:

The objects of my improvement are, first, to provide a bee-smoker having a fire-box or cylinder so constructed that the draft-funnel from the bellows enters the cylinder at the top above the flame, and in a direct line with the smoke-funnel, instead of at right angles thereto, as heretofore constructed; second, to provide a bee-smoker having a cylinder with a raised or false bottom, proper vents, and an adjustable hinged funnel-top, and so constructed that the fire-cylinder will require no hand-shields, and will at all times be in a perpendicular position, whether the smoker is at rest or in use, thereby avoiding the usual derangement of its contents.

The manner of using my improved smoker is as follows:

After starting a fire in the cylinder with proper fuel, the operator works the bellows by the thumb and finger. As my bee-smoker when in use is carried in an upright position, and the draft-funnel enters the fire-cylinder in direct line with the smoke-funnel instead of at right angles thereto, the draft from the bellows will drive the smoke to its work with more directness, increased force, and greater efficiency, while at the same time, the draft-funnel being above the flames, the fuel and ashes will remain undisturbed by the most vigorous operation of the bellows.

Honey Out of the Rock is the name of a new religious song-book which we understand is "greatly admired." It very likely would be much appreciated by bee-keepers, but perhaps one called "Honey Out of the Hive" would be more welcome just now, in view of the unfavorable honey season in some localities. But should there be a good fall crop of honey, bee-keepers may then be permitted to use "Honey Out of the Rock" for their spiritual benefit, and "honey out of the hive" to delight and recuperate their physical natures.

Instinct or Reason in Bees.—On this subject the *Phrenological Journal* takes the position that the acts of bees are governed by intelligent thought. To prove this, it cites the fact that bees gather honey only in climates subject to wintry weather. If our bees are taken to Australia, where the summers are perennial, they learn in a few years to store no honey, gathering it only as they need it for sustaining life. The only way the Australian can get honey is to import queens from old countries every few years, they not having learned that the storing up of honey is unnecessary. —*Exchange.*

Electricity.—Prof. Elihu Thomson, the inventor and brains of the Thomson-Houston Electric Company, contributes an entertaining, scientific and thoughtful paper on "Future Electrical Development," to the July *New England Magazine.* He explains the possibilities of electricity, in all the public and private conveniences of life, and gives practical examples of its application to manufactures, rapid transit, and domestic offices, such as cooking, ironing, heating, gardening, raising fruit and vegetables, etc.

Honey-Bees haunt the flowers and blossoming trees of New York, especially the horse-chestnuts. The blossoms of this tree have a peculiar fascination for bees of all sorts, and in regions where bees are plentiful, there is a noise as of a swarm about each horse-chestnut. It is an old tradition that the horse-chestnut blossom contains an intoxicant which makes the honey seekers drunk, and causes them to drop senseless to the ground, where they become the prey of ants.—*Exchange.*

The Season is late, being several weeks behind the usual time; but it is quite likely that it will continue as much longer, and thus average up all right.

The Adulteration of Honey —We have received from Mr. Chas. F. Muth, of Cincinnati, Ohio, copies of some correspondence between the *American Analyst*, of New York, and both Prof. H. W. Wiley and Mr. Muth. The latter desired us to publish it in the BEE JOURNAL, so that the bee-keepers might understand the whole matter, especially as the recent Report issued by the Department of Agriculture, classed Mr. Muth with other adulterators of extracted honey.

The following letter accompanied a copy of Prof. Wiley's, sent to Mr. Muth by the editor of the *American Analyst*, Dr. H. Lassing:

MESSRS. CHAS. F. MUTH & SON,
Cincinnati, Ohio.

Dear Sirs:—We enclose herewith a copy of a letter just received from Dr. Wiley, which we shall publish in July 1 number. We enclose it to you as soon as received, so as to give you ample time to reply, if you think it best to do so.

Yours very truly,
THE ANALYST PUBLISHING CO.

New York, June 22, 1892.

The letter referred to in the foregoing, written by Prof. Wiley, is as follows:

EDITOR AMERICAN ANALYST.

Dear Sir:—The spirit which you show, of giving ample opportunity for every one to be heard on the question of adulterated honey, is most gratifying; especially is your invitation to dealers whose goods have been found to be adulterated, to explain the matter in your columns, an evidence of good faith on your part, that you wish only to do justice to the parties.

I have read with much interest the letters from different manufacturers in your issue of June 15. In one of these letters reference is made to me in a way which seems to call for some explanation, and I beg the favor of being allowed in your columns to make some comments on the letter from Chas. F. Muth & Son, published on page 211 of the issue mentioned.

I have no desire whatever to do Mr. Muth any injustice, and I am ready at any time to make amends in case I have done so. I understand that Mr. Muth bears a very high reputation for honesty and straightforwardness among his associates, and I should be extremely sorry if anything I should say or do should tend to diminish the esteem in which he is held. It was unfortunate for him that the samples of honey bearing his label should have been found to be adulterated, but it only shows the necessity, which is incumbent on dealers, to be more careful of their goods.

From an ethical point of view, I will say I doubt very much whether Mr. Muth is justified in selling honey which he purchased in California as the product of his own Italian apiary. He says at least, in his letter, that the amount of honey which he himself produces is of very little importance commercially, while his chief business is in buying and selling honey. Mr. Muth, unconsciously or otherwise, perpetrates a fraud on the community when he sells honey produced by others as his own. It is not exactly adulteration, but it is a business process which is something nearly akin to it.

With Mr. Muth's methods of doing business, however, I have nothing whatever to do; what I desire to call attention to is his statement that he left samples of honey with me, and that the best I could say was, "that they were adulterated, and that one was probably pure." Now, Mr. Muth has either never read my report on these honeys, or else he purposely misconstrues it, or he has forgotten what I said. The report to which he refers, was not made at Flint, Mich. (but that is not a matter of any consequence), but it was published in the *American Apiculturist*, Vol. III, No. 12, 1885. It was published verbatim in Bulletin 13, Part 6, page 801, *et. seq.* I beg you to turn to that report and see how grave an injustice Mr. Muth has been guilty of. The statement in his letter is one which we would not expect to come from one of his high standing in the community, and I feel very sure that Mr. Muth will cheerfully correct it when his attention is called to it. I would caution Mr. Muth, however, in this matter about depending too much upon his memory in matters of such grave importance.

I did not pronounce a single sample of honey obtained from Mr. Muth, to be adulterated. There were a few samples obtained from him, described on page 802, but which it is expressly stated in the description were not produced by him. One was No. 14, described as a sample from Louisiana; another was No. 16, described as a sample from Florida; another was No. 17, described as a sample from Florida. These numbers—14, 16 and 17—are included in a

table on page 804, which is headed, "Honeys apparently adulterated with inverted sucrose." On page 805, in describing this table, I use the following language:

"These 16 samples I have grouped together on account of their great levorotatory power.....It is possible that this great deviation to the left may have been due to the entire absence of dextrine or sucrose in the honey, or that it might have been produced by the bee-food being rich in sucrose, which suffered a nearly complete inversion in the body of the insect.

"It would be quite improper to definitely assert that invert sugar syrup had been added as an intended adulterant. I think it quite possible that bees having access to sucrose food might at one time produce a honey like that in Table No. 2, and at another like that in Table No. 3."

At the same time I received these samples of honey from Mr. Muth, he gave me other samples which were produced by himself, described on page 803, viz.: Sample No. 39, donated by C. F. Muth; sample No. 40, donated by C. F. Muth; and sample No. 43, donated by C. F. Muth. On page 805 I say of these samples:

"These honeys, obtained directly or indirectly from well-known apiarists, I have every reason to believe to be pure. If they contain any adulteration it has been added by artificial feeding, and not intentionally. It will be observed that these honeys are strongly levorotatory, and indeed so much so, that some of them might have appeared in Table No. 3."

Now, Mr. Editor, I do not have the honor of your personal acquaintance, but I leave it to you to say whether or not any fair-minded man in reading my report would dare to say that I had pronounced the honeys in Table No. 3 to be adulterated; or would Mr. Muth, if he had access to the facts of the case, have said in his letter that "the best Mr. Wiley could say of the samples was that they were adulterated, and that one was probably pure."

This old story that I pronounced genuine samples produced by Mr. C. F. Muth, to be adulterated, has been going around through the bee-papers for many years, together with a vast amount of personal vituperation; I think it is about time for such publications to cease, and thus I call attention, through your columns, to the facts in the case.

I also beg to correct another expression in Mr. Muth's letter, viz.: The reference to the machine which is used for the conversion of corn-starch into glucose. This reference to the machine was not made by Prof. Scovell, as Mr. Muth supposes, but by myself in discussing Prof. Scovell's *data*.

In the samples of honey purchased in the open market in the East, none bearing the label of C. F. Muth & Son was found.

The adulterated samples of Muth's honey were analyzed by Professors Weber and Scovell, and the comments on the analyses were made by myself. You allude to this same reference as "undignified," and perhaps it is so, but when I saw the enormous frauds which were practiced on the community by selling glucose as pure honey, and especially under the name of well-known apiarists, I felt that some drastic measures were necessary to correct the fault. I, therefore, sometimes may have indulged in the use of language not altogether proper, but if so I am ready to make any necessary apologies.

I am sorry to say that if Mr. Muth continues to depend upon his own taste, he will probably continue to sell adulterated honey to the end of time, labeled "absolutely pure," as I do not believe it is quite possible to discriminate by the taste, between the pure and the adulterated article. I, however, am no expert as Mr. Muth is, and hence cannot express any positive opinion on this question. Mr. Muth claims that he is no adulterator; will he now acknowledge in a suitable way, that he is no misquoter of facts, by acknowledging the error which he made in his letter to you?

I am only too anxious to join Mr. Muth and all others who are disposed to put an end to honey adulteration, and it was for this purpose that Bulletin No. 13, Part 6, was prepared. I heartily endorse the sentiment expressed by Thurber, Whyland & Co., in favor of national legislation to prevent the possibility of such frauds as are indicated in Part 6. All the bee-keepers themselves ought to join most heartily in this movement, for if the adulterated honey could be kept out of the market, the price of the pure article would certainly be very much increased, and their business become all the more profitable. The bee-papers also should help this along, but, strange to say, instead of doing so they have devoted an immense amount of space to the personal abuse of the writer; denouncing his methods and his honesty, and questioning his veracity and his capacity, and denying absolutely that any adulteration of honey is prac-

ticed. I am at a loss, of course, to explain such conduct, but evidently there is a motive for it, otherwise they would be willing to accept the facts, and help the good work along. I am,

Respectfully,

H. W. WILEY, *Chemist.*

Washington, D. C., June 20, 1892.

Mr. Muth's reply to the foregoing letter of Prof. Wiley, is as follows :

THE ANALYST PUBLISHING CO.,
New York.

Gentlemen :—Allow me to give you a short history of my experience as a bee-keeper, which will explain satisfactorily to any one my "fraud on the community," as Mr. Wiley pleases to term it.

It was, I believe, in the spring of 1869, when the first honey extractor made its appearance in America—a wooden barrel with a revolving basket of tin inside of it, imported, I believe, by J. H. King, of New York. My friend, I. H. Hill, of Mt. Healthy, O., bought one of those extractors, which I used as a pattern, and had, at once, one made for myself.

On the roof of my house at the foot of the hill, at the edge of our city at that time, was my apiary. The garret was my extracting room, and the wooden extractor became leaky, and the idea offered itself, "Why not have the revolving basket in a tin can ?"

In August, 1869, Mr. Henry Stephenson, a bee-friend and tinner, made for me a tin honey extractor—very likely the first tin honey extractor in America. The following year, 1870, Mr. Stephenson made a dozen or more tin honey extractors, which I sold to my bee-keeping friends.

Aided by the honey extractor, I had produced over 500 pounds of fine clover honey on the roof of my house, and, like my friends, was surprised at the large crop. We sell, now, a carload to one of our customers every five or six weeks. All of the 500 pounds were sold by the time that the crop of 1870 was harvested, which was larger than that of 1869. We bought some honey from neighboring bee-keepers to supply our demand, and increased our apiary.

My labels of to-day are the same as they were twenty odd years ago, plain and unostentatious, and read: "Pure machine extracted honey from the Italian apiary of C. F. Muth." The "Son" was added afterwards, when my son became a partner in the business. Fancy labels were offered us many times, and promptly refused, because, in my estimation, our pure honey did not need them, and I knew that "snide" goods were generally adorned with fancy labels ; besides, our trade had become accustomed to our plain labels, and we, naturally, disliked to make a change, considering the old labels our trade-mark. I enclose samples of our labels, the same we have had for twenty odd years.

Being in the mercantile business, we had our own square-glass honey-jars, made and sold them largely to other bee-keepers, who bought also the same labels that we used. We had them printed, omitting the name of producers, so that we could have their addresses printed at short notice. Being a bee-keeper; I had no more idea, 23 years ago, than I have now, of imposing on the public by the means of my labels.

Our labels might be changed slightly to meet the extra-nice criticism of some fault-finder, but considering them a trade-mark, we are apt to leave them as they are. As we produce 8,000 to 10,000 pounds of extracted honey in a good season, I leave it to the reader to judge of the importance of the so-called fraud by our labels. To me, the matter seems ridiculous.

Further, I deny the statement of Prof. Wiley, that we ever labeled California honey as coming from our own apiary. If we ever had such labels printed, I should know it, and we should still have some on hand.

When quoting Prof. Wiley's report, I had not the least desire of misquoting or doing an injustice to the Professor. I merely quoted the sense of his report. Its exact wording is as immaterial to me as the date when, or the place where, it was made. It is immaterial to me whether it was at Flint, Detroit, or Indianapolis ; but the fact is, that at one of those places I gave the Professor, at his request, a number of samples of honey for analyzation. All of it was pure honey, without any doubt about it, *i. e.*, if there is any pure honey at all.

I do not know what standard Prof. Wiley has for pure honey, but I verily believe that my samples could have served the Professor as a standard.

Prof. Wiley reported at the next annual meeting in person, in substance, as follows, that most of those samples were adulterated, and that one was probably pure. Present were Prof. Cook, of the Agricultural College at Lansing, Mich., Mr. Thomas G. Newman, of the AMERICAN BEE JOURNAL, of Chicago, and a large number of other bee-keepers who remember, and will verify my statement.

Our bee-papers and bee-keepers, myself included, have been, and are fighting adulteration, and we solicit the aid of Prof. Wiley, as well as that of any other chemist. But we have no use for "scientific pleasantries," such as Prof. Wiley in lulges in.

His article in the *Popular Science Monthly*, alleging that a factory in Philadelphia was manufacturing comb honey of stearine (or paraffine) and filling the cells with glucose, then capping them over in a nicer manner than the bees could do it; stating furthermore that this spurious honey sold readily in our markets for pure honey, has done harm to the bee-keepers and honey-dealers. If Prof. Wiley had not been posted on the subject, he should have posted himself before giving to the world such a falsehood. If he would have explained his "scientific pleasantry" in due time, as he was forced to do later, it would have been more becoming to the high office he fills, and it would have created less "bad blood" among bee-keepers. In this case, I may also lack statistical preciseness, but it alters not the fact that Prof. Wiley wrote the article mentioned above for the *Popular Science Monthly*, and never took it back until a few years afterwards, when he was compelled to do so by the action of bee-keepers and editors of bee-periodicals, which had become too strong for him to resist.

Is it a wonder that bee-keepers and editors of the bee-papers don't count on Prof. Wiley as one of their friends? And are bee-keepers to blame if they don't?

The adulterator is the natural enemy of every honest producer and dealer, and every assistance in the battle against him will be gladly accepted.

Yours very truly,

CHAS. F. MUTH.

Cincinnati, Ohio, June 27, 1892.

A Large Portion of the Agricultural Exhibit which Illinois will make at the World's Fair will be selected from the exhibits made at the State Fair at Peoria the coming fall. In order to encourage the farmers to make especially fine exhibits of farm, orchard and garden products, the State Board of Agriculture, which has in charge the preparations of the State's World's Fair exhibit, has offered a number of cash prizes aggregating $6,500.

QUERIES AND REPLIES.

National Flower of the United States.

Query 827.—1. What is your choice for the National Flower to represent the United States of America? 2. Please give your reason for such choice.—Esmeralda.

1. I have no choice.—G. M. DOOLITTLE.

1. I really don't know.—J. M. HAMBAUGH.

1. I have no choice in the matter.—M. MAHIN.

1. Golden-rod. 2. "Because."—H. D. CUTTING.

1. Golden-rod. 2. Great distribution.—J. P. H. BROWN.

1. If not used by other nations, I'd say "the rose." 2. I like it best of all flowers.—C. C. MILLER.

1. The golden-rod. 2. It is a handsome flower, hardy, and is spread over a very large extent of territory.—P. H. ELWOOD.

1. Clover (the *Trifolium*). 2. It is the most useful, the sweetest, and in masses in the field as pretty as any.—MRS. L. HARRISON.

1. The golden-rod. 2. The editor would show me the door before I had half finished, were I to begin.—MRS. J. N. HEATER.

1. The beautiful golden-rod. 2. Because it is found in every State and territory, is representative in its character, and a good honey-plant.—C. H. DIBBERN.

1. The golden-rod. 2. There are no wild flowers in this country more admired by most people than the golden yellow flowers of the golden-rod.—G. L. TINKER.

1. The "golden-rod." 2. Because it grows everywhere; is indigenous, consequently the only natural universal valuable plant in the United States.—J. E. POND.

1. White clover bloom. 2. Some select golden-rod, but to us it is a useless weed. All the "golden-rod honey" harvested *here* is "Spanish-needle honey."—DADANT & SON.

1. I have nothing nearer a favorite than the golden-rod. 2. That plant

seems very appropriate. Its choice is detrimental to bee-keepers, because for every plant cultivated, there will be a hundred cut for "National" bouquets. —JAMES HEDDON.

1. Golden-rod. 2. *a*. Because of its euphonious name. *b*. Its fine appearance, both in nature and in paintings. *c*. Because it grows over a wide range of country.—EUGENE SECOR.

1. I have not canvassed the matter sufficiently to bring myself to a decided opinion, but I rather incline to the golden-rod. 2. It is handsome, and common throughout the country.—R. L. TAYLOR.

1. The pansy. 2. I always liked the pansy; it is a beautiful flower. It is first in the spring, and last in the fall. It will stand a very great deal of coldness and abuse, and still show up its smiling face.—E. FRANCE.

1. I would say the lily, but as some other nation (France), I believe, has chosen this, I would suggest some of the white blooming varieties, such as the white chrysanthemums. 2. Because white is an emblem of peace, and where peace is, happiness is almost sure to abound.—MRS. JENNIE ATCHLEY.

1 and 2. The golden-rod has more points in its favor than any other plant that has been brought forward. It is a hardy plant, with a beautiful flower, growing abundantly throughout nearly our whole territory. These are essential qualifications, and are not possessed to the same degree by any other candidate. —JAMES A. GREEN.

1. If we are to have a National Flower, I should prefer the golden-rod. 2. Because of its beauty, and being known in all parts of our country; but I am not in favor of a National Flower. The stars and stripes are good enough for me. We have got too much of the "Old World's" products and ways now for our good.—A. B. MASON.

I cannot feel any interest in a mere sentiment of that kind. I would rejoice to see a little more honesty in politics, in government, in trade, in society, in all things among men in the United States of America. After that, I would prefer—1. The golden-rod. 2. Because it is a child of nature—beautiful, because the hand of man has never put any artificial touch in its native airs.— G. W. DEMAREE.

1. Our choice, by all means, for a National Flower to represent the United States of America, is the "golden-rod." 2. The reason for such being our choice, is because it is indigenous to the soil, and grows in nearly every State and Territory. It is purely an American flower; is tall and stately, full of beauty and grace, and does well represent the country, which stands as a beacon for the glorious future of the world. It is a grand floral pole, and would well represent the United States as its National Flower.—EDITORS.

Old or Young Bees.—Mr. A. Leggott, of Puyallup, Wash., sends us the following item from a California newspaper, being a question about swarming bees:

To settle a difference of opinion, please tell us whether it is the old bees or the young ones that come out when they swarm?

Answer: Old bees.

Mr. L. wrote that it was news to him, that old bees leave the hive when swarming. It may be "news," but it is a fact, nevertheless, that the old bees, as well as the old queen, leave the hive when they swarm. The young bees are at first nurse-bees in the hive, and attend to various inside duties.

More than 1,000 men are now at work on the mammoth Manufactures Building for the World's Fair. The force was recently doubled by order of the Exposition authorities, who concluded that the contractor was not making as rapid progress as was desirable. The authorities are determined that all of the buildings shall be completed in time for dedication in October, and the public may be assured that this will be done. The total number of workmen at Jackson Park now exceeds 7,000. It will probably be increased to 10,000, or more.

The Globe Bee-Veil, which we offer on the third page of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, with $3.00.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Interesting Apiarian Reminiscences.

J. H. TOWNLEY.

Being indebted to some unknown friend for a copy of a recent date of the AMERICAN BEE JOURNAL (the first periodical issued in the world devoted exclusively to bee-culture), I know of no way to reach him with thanks except through that paper.

The first issue of the AMERICAN BEE JOURNAL appeared in 1861. The late war commenced that year, and its publication was discontinued until the close of the war, when it was resumed. From 1866 to 1882, when I went out of the bee-business and moved from Michigan to Dakota, I was a continuous subscriber for and reader of the BEE JOURNAL. The first copy I have seen since then was received this week. Many of the names of correspondents and advertisers in it now were familiar there 10, 15, and a few 20 years ago. Two from my former State—A. J. Cook and H. D. Cuting—I was somewhat acquainted with.

PROF. COOK'S EARLY BEE-LESSONS.

In June (I think in 1867), after a ride of 30 miles on the cars, and 7 in some other way, Prof. Cook, an entire stranger to me except in name, stepped into my door one morning while the family were at beakfast, on urgent, pressing, business; business so pressing that he could scarcely finish his breakfast, before it was, "Come, Townley, I have work for you to-day;" and he was correct. Before he stepped on the ground he had work planned for every moment he had to spare.

During the six or seven hours he was there, he kept my hands busy transferring all the contents of box to frame hives, starting nuclei, showing the *modus operandi* of rearing queens artificially, and other kinds of work that one finds it necessary to do in an apiary; and my tongue was kept equally busy in answering questions. He came there to learn, and knew just what course to pursue to obtain the desired information. If he did not enjoy the lesson hugely, the expression of his face greatly belied his emotions. The pupil then, is the teacher now; and the novice who reads and heeds the lessons taught in "Cook's Manual," will not go far astray.

Among the familiar names seen in the BEE JOURNAL is that of one to whom I have sold tons of extracted honey, one whose dealings with me were always prompt and honorable—that of Mr. C. F. Muth, of Cincinnati, Ohio.

THE YELLOW BANDS ON ITALIAN BEES.

During the ten years that I have not been a reader of the BEE JOURNAL, two more yellow bands have appeared on the abdomen of the Italian bee. Now there are five, ten years ago there were three; and 25 years ago, when they were first extensively disseminated, one needed a powerful magnifying glass and a vivid imagination to discover even three on some that were sold for pure Italians! There is probably no doubt but that, with a long continued and persevering effort in breeding with that object in view, bees may be produced with nearly the whole abdomen yellow. But will it pay? If one admires the high color, and in breeding makes utility the primary object, and beauty a secondary one, it certainly will. On the other hand, if beauty alone is aimed at in breeding, one who pursues that course will, like many a youth, sooner or later, learn that all else has been sacrificed to fancy.

That the AMERICAN BEE JOURNAL may continue its usefulness as long as bee-keeping continues to exist, is the sincere wish of one, who, through the greater part of a life of nearly three-score years and ten, has been an enthusiastic worker among the bees.

Ashton, S. Dak., July 2, 1892.

Removing Propolis from Separators.

EMMA WILSON.

When I cleaned the T tins with concentrated lye, I felt pretty sure that hives, supers, separators, etc., could be cleaned in the same way, but I was so busy I could not take time just then to experiment, so I concluded to say nothing about it until I could find time to test the matter. This morning (May 5) being the first opportunity I have had, I concluded to experiment a little.

I put on the wash-boiler with water and lye, then went to the shop and selected the most badly propolized supers and separators that I could find as fit subjects on which to experiment. I

dropped a few separators into the boiler while the water was yet cold, to see what effect it would have on them. I could not see that it affected them in the least until the water almost reached the boiling-point, when the propolis disappeared.

What I was most afraid of, was, that the separators while wet would cling so closely together that the lye would not reach every part, and that they would not be perfectly clean. I was glad to find these few did not bother at all, but came out perfectly clean. I stirred them with the poker while boiling, although I do not know that it was necessary, as I tried another lot without stirring, and they came out just as clean. I next tied up a bundle of 59 separators, that being the number I had handy. Of course, they were tied loosely. I dropped them in, having a strong cord tied around the middle of the bundle to lift them out by. I let them boil two or three minutes, and took them out; 32 of them were perfectly clean. The rest, the center of the bundle, still had some propolis left on, and were treated to a second dose.

Taking a very large quantity of the separators at one time, there might be more trouble than I think, about getting them clean, but I do not believe there would be if the water were kept hot enough, and enough of the lye used. I do not think any harm would come from having it unnecessarily strong.

I next tried dipping the T supers. My boiler was large enough to clean only half a super at a time, so I had to dip in one-half, reverse it, and dip the other half. Had I been able to dip one all at once, I think I could have cleaned one a minute. And they are beautifully cleaned. I do not know of any other way they could be cleaned so nicely—quite as clean, I think, as when new. We scraped all our supers before the lye was thought of; and while they are much improved by the scraping, they are not nearly as nice as when cleaned with lye, and the scraping is harder work.

I did not have anything large enough to dip a hive into, but of course a hive would clean as readily as a super. With convenient apparatus to work with, a large number of such articles as separators could be cleaned at a time with no very great amount of labor. It is such a comfort to have everything clean! Wood separators are so cheap that we have always thought it did not pay to clean them. I rather think we shall conclude that it does pay, after this, providing we can get them satisfactorily dried in good shape.—*Gleanings.*

Marengo, Ills.

Self-Hiving Arrangements for Swarms.

HENRY ALLEY.

As I brought to notice the first successful self-hiver, I naturally am interested in anything that appears in the bee-papers in relation to these most useful articles for the apiary. I recently read much that Mr. Dibble has said about self-hivers, and I must say that I am amazed at some of his statements and claims.

Mr. Dibble, like several others, claims to have devised the *best* of self-hivers. I find, however, that before reading all the wonderful things concerning their devices, as given by the inventors, they acknowledge that their swarmers do not catch *all* the bees that issue—"only a few bees and the queen." Well, it seems that Mr. D. has simply arranged the principle of my drone-trap, and placed it at the side of the hive, instead of at the entrance. The entrance, as it appears to me, is covered by a narrow strip of perforated metal.

Mr. D. says that the trap (Alley's presumably) clogs, etc. Well, if my trap will clog with four rows of holes, what will bees do with one entrance and one row of holes? The truth is, there are 100,000 of my traps in use, and they have always given good satisfaction. The fact that the sale of them is increasing each year, best attests to their practicability.

Now, if Dibble's self-hiver catches only a few of the bees and queen when a swarm issues, how can it be considered an improvement on the trap? The trap has always done this to the satisfaction of all who use them.

Mr. D. gives notice that he has applied for a patent for using the empty hive over the one the bees are in, for hiving swarms by this arrangement. I wish to say that the first swarm ever hived by an automatic device, was hived by the same arrangement which Mr. D. proposes to patent. Mr. D. says further:

"Put *me* down as saying, the man who succeeds in giving us a successful trap of any kind, will give us something besides an entrance trap. We must have a trap when we can at a glance tell where our queens are. We must know instantly, when passing through a yard,

which colonies have cast swarms, *without opening a hive.*"

Further on I present the reader an illustration of a self-hiver devoid of all objectionable features enumerated by Mr. D.; and, what is more important, is the fact that this arrangement not only catches every bee that issues and hives them in the box, but it catches and destroys every drone that attempts to leave the hive for a flight. They cannot clog the entrance at all. This swarmer is placed at the entrance of the hive the bees occupy, and, as it has such a wide entrance, the bees are not in the least hindered in going out and in when at work.

The box is provided with two covers—one is solid wood, and the other is a light frame covered with wire cloth. The all-wood cover keeps out the wet and light, the other keeps the bees from flying out when the wood cover is raised to see if the bees have swarmed.

For a person absent from home one or more days at a time, this swarmer will be found just the thing. On returning home, all the apiarist needs to do is to raise the cover of the box. If the bees have swarmed, the box will be found full of bees, and working nicely, as there is room in each box for five Langstroth frames. The box can be made as large as the person using it desires.

Now, to show that I am making no idle claims, I am ready to pay $5 for every swarm this hiver fails to self-hive. I do not mean hiving the queen and a few bees, I mean *all the bees that come off with the swarm.* I feel warranted in making this offer, with the experience I have had with it this season.

Below is a brief description of a perfect self-hiver:

The trap (Fig. 1) is made nearly twice as wide, from end to end, as those usually sold for drone-and-queen catch-

Fig. 1.—Combination Drone-and-Queen Trap and Self-Hiver.

ers. It is also provided with four tubes, and the luckless drone or queen that sallies forth to leave the hive is sure to be trapped. The trap has a metal front and back. This provides the needed ventilation to the largest colony of bees. In fact, this self-hiver is a superior drone catcher, as no drone returns to the hive after once leaving the brood-chamber; nor are they fussing at the entrance a long time trying to escape. Hardly does the drone go to the entrance when he discovers one of the four tubes, and, before he knows it, is in the trap. It is the same with the

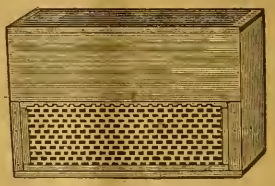


Fig. 2.—The Perfection Self-Hiver.

queen. As surely as she leaves the combs with a swarm, she is trapped.

Figure 2 illustrates the swarmer complete, ready to catch a swarm. The box is 18 inches long, 10½ inches wide, and 10 inches deep. This is large enough to give the largest swarm all the room they need to cluster in for awhile, at least.

Half of the front of the box is cut away, and the trap is pushed in to fill the space, and so that the front of Fig. 1 is "flush" with the front, or face of the box. The bottom of the metal where the bees pass through, is depressed, so that the bees enter the hive easily, and with as little delay as possible.

The trap is provided with a small swinging door at one end, so that the queen can be taken or shaken out, also for removing dead drones, etc. The trap can be used separately for catching drones when not used as a self-hiver.

When a swarm issues, the queen enters the trap. The bees, after circulating about in the air, return, or they may settle on some tree and hang there for awhile, and then return to the hive. As soon as they reach the entrance they discover their queen, the very object they returned for, and the bees at once cluster in the box. This arrangement is a self-hiver in every sense of the word, as it catches the entire swarm.

Now, is not this an easy and interesting operation, as well as a labor and bee saving device. Just think how happy a person can be when he leaves home in the morning, to know that on his return he will find his bees already in a box ready to be hived, if they have swarmed during his absence. His wife or attendant will not have a chance to say when the bee-keeper returns home, "The bees have swarmed and decamped." No,

sir; no bees can decamp, nor will a swarm be found hanging 50 feet in the air on the limb of some neighbor's tree; in some chimney, or in the coving of some house.

The other morning a swarm came off just as I was going to the post-office. They settled on a limb of a tree near by; when I returned 20 minutes later, the swarm had returned to their old location, self-hived, and so quiet that no one would have selected that colony as the one that had just cast a swarm.

Experience in Bee-Keeping, Etc.

J. E. PRICHARD.

I commenced last year with 3 box-hives of black bees, and being desirous to know more about the industry, I got a queen from an Ohio breeder, and introduced her on June 11. I procured one 3-frame nucleus on July 11, and six No. 2 dovetailed hives, complete, and then awaited developments.

I did not get a swarm, but destroyed 2 colonies by the "driving process," and obtained about 25 pounds of surplus honey in one-pound sections, which I sold for 25 cents per pound; mostly from the 3-frame nucleus that I secured from an Indiana dealer in bees.

I had 2 colonies of Italians and 3 of blacks which wintered well on the summer stand, under a shed. This spring I transferred one, and in just 35 hours it was robbed to death. I then drummed out one, and that all dwindled to death, so I virtually had only 3 colonies left to commence with. That is the dark side; now for the bright side.

On May 20 came the first prime swarm; on the 24th, another, and on the 20th, another. On June 1, I had an after-swarm; on the 2d, another, and on the 3d, another. Talk about fun!

The June 1st swarm, after staying in 24 hours, and drawing out the foundation nicely, left; but I think it went to the parent hive, and came out the next day; so I did not lose them. I divided one last year's colony on June 5, and this morning (June 11) I examined the whole lot, and found them all doing well. Some are at work in the supers, while others, notably the after-swarms, are filling their combs with the whitest honey I ever saw; it is capped snow-white, but they have no brood—perhaps it is too soon. I am a novice, and want to learn by experie ce, with common-sense suggestions from the BEE JOURNAL.

SOME BEES THAT HEAR.

I was astonished when I read what Julia Allyn wrote on page 774, and to test the thing I went to the bee-yard last night, and, taking a small empty box I held it in front of the hives, and some distance away, and tapped on it, so as to make a noise; all the bees responded immediately, and filled the entrance. My bees hear, if others have deaf ones. I leave them to their enjoyment. I love the pursuit, and am in it to a finish.

Port Norris, N. J.

Making Use of Brood-Combs.

C. H. WOOLDRIDGE.

Allow me to call attention again to the question I asked, and which was very truthfully answered on page 804, about making use of brood-combs.

About a year ago some one, in an article in the BEE JOURNAL, entitled, I believe, "Some Points on Bee-Keeping," said: "Do not hive swarms on full combs, or you will be the loser instead of the gainer." The reader was left to guess the reason why.

I believe this matter to be of much importance, especially to the producer of comb honey, although I am not sure that I fully understand the whys and wherefores.

Is the reason because the queen, before leaving the parent hive with the swarm, has laid nearly all her eggs, so that she would be light, and therefore able to fly with the swarm? and, in consequence of this, would not be able to fill the empty combs (in the new hive) with eggs; therefore the combs are filled with the nice white honey which should have gone into the surplus department (as swarming occurs in this locality when the white clover is in bloom)? Or is it because the queen will lay too many eggs just at this particular time, and therefore it costs more to rear the bees than they would be worth after being reared? In either case (that is, if either is a fact) the question is still before us—what to do with the combs?

Last year I used my extra combs by giving one to each swarm, with starters on all the other frames, and put the partly filled case of sections from the hive whose colony just swarmed, on the

new hive, and the storing of honey went right along; but whether I lost or gained by this method, I cannot say, or whether I might use two or more combs with as good results I do not know. My hope was, in propounding this question, to get some points touching upon its importance. Will those who have had experience along this line, please give it in the BEE JOURNAL.

I have just been cutting the drone-comb out of the hives of 49 colonies of bees, and fitting in worker-comb in its place, and I used about 70 combs to do the job. Some hives I found to have as much as 2 to 2½ combs of drone-comb. That is the way the money (or honey) has gone.

Brownville, Iowa, June 23, 1892.

Cold Water for Moths in Combs.

C. H. DIBBERN.

We are trying many experiments this season, one of which is the cold water cure, for the moth in brood-combs. Heretofore we have generally been obliged to melt up a good many moth-infested combs, to save them during the summer. Now we have a large trough near the honey-house, that we keep full of water, and when we find combs that show signs of moth, we douse them in, and leave them submerged for two or three hours. We think this is better than sulphur smoke, as it does away with the strong sulphur odor on the combs, and washes out most impurities. We find that it is not necessary to run the combs through the extractor, as a quick, swinging motion will throw out all the water. The combs should be loosely piled up to dry. We now allow the bees to remove all the honey before subjecting the combs to the water.

We have exposed honey more freely right in front of the apiary this spring, than ever before. Sometimes we had as many as twenty hives containing honey setting along in a row with the caps off, off, exposing the tops of frames. That seemed to be about the only way we could get the bees to take the honey that we wished to get rid of before the white clover bloom. Years ago we would not have dared to do such a thing, but somehow we have had no trouble from robbers whatever. They seemed very grateful for the honey, and worked on in a very ordinary way, and not at all cross.—*Western Plowman.*

Milan, Ills.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
July 21.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec.. Steel Creek, N. C.

Aug. 17.—Wabash Valley, at Vincennes, Ind.
Frank Vawter, Sec., Vincennes, Ind.

Aug. 27.—Haldimand, at S. Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.

Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel,Wis.
Benj. E. Rice, Sec., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich.

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Rolling in the Honey.

My bees are booming; that is, just rolling in the honey.

D. A. CADWALLADER.

Prairie du Rocher, Ills., July 4, 1892.

Prevention of Honey Granulation.

I noticed an inquiry on page 11, as to how to prevent granulation of sugar syrup in brood-combs. If the syrup is made in the usual way, and *not stirred* after taking from the fire until quite cool, it will not granulate. I wintered a colony on sugar syrup without an ounce of natural stores, and they wintered as well as any bees I had, and the syrup did not granulate.

LAWSON HEGLER.

McLean, Ohio, July 2, 1892.

Failure of Honey Predictions.

The honey in this locality is not, to say, white, and at least 75 per cent. short of the last three years. There has been no swarming in the surrounding country, as far as I have heard. Mr. Sam Wilson's predictions, on page 580, will not hold good for this part of Kentucky for white clover. There is one cause by which we may know there will be a failure of white clover six months ahead. There is no cause by which *we* may know of a good flow of honey ahead of time, only He who sends the rain, wind, and sunshine knows that.

J. M. PRATT.

Todd's Point, Ky., June 28, 1892.

Commencing to Extract Honey.

Bees are doing very well. I wintered 40 colonies in chaff hives on the summer stands, and lost only one. I will commence to extract honey to-morrow. I have had only three swarms so far; I am trying to prevent swarming, and think I will succeed by giving plenty of room.

A. A. SIMPSON.

Swarts, Pa., July 4, 1892.

A Queen from Arkansas.

I have to-day received and introduced a queen from Arkansas. The queen's abdomen is yellow, including the tip; also a large crescent on the thorax. The workers are fine, showing the three bands when empty. The drone also accompanying the other bees has an abdomen nearly all yellow. It is too late to test the queen's progeny on white clover, but I will try them on sweet clover and fall flowers.

C. E. MEAD.

Chicago, Ills., July 4, 1892.

Land One Vast Flower-Bed.

I feel something like Hawkeye, the old Indian hunter. One day he got into a covey of Indians, and was shooting right and left, and all at once his stock of powder gave out. He stood his rifle up against a rock, and said to himself: "Stand there, *La longu carabini*," meaning you are of no more use to me than the mullen-stock; and that is the way with my bee-hives. They are as useless to me as so many dry-goods boxes. I have 7 colonies of bees, good and bad, left yet. I had one swarm come out on June 18, and one on June 19. I had a colony in a ten-frame hive, that, when I put them out last spring, was heavy, and had lots of bees; and last week I took out the combs and found ten worker bees and one queen! I transferred them to a hive that I have transferred 11 colonies to this spring, and now there are perhaps 50 workers in it, all told. I just had another swarm come out and go back again. I have lots of hives filled with combs, and considerable honey for the swarms that my yet issue. The prairie and timber land is one vast flower-bed. I can show more honey-plants in blossom than can be seen in any State east of here. If I had my 50 colonies, I could fill the hives with honey in short order. My farm is on the edge of the timber belt in the famous park region of Minnesota, and cannot be excelled in anything.

I hope my friend, Mr. Lillibridge, of Port Allegany, Pa., will not be offended at my joking him about the hemlock trees.

MARK D. JUDKINS.

Osakis, Minn., June 24, 1892.

Can Bees Hear?

On page 774 of the BEE JOURNAL for June 9, I notice an item taken from the *American Farmer*, which asserts that bees cannot hear. If this be true, why do they make the various noises so familiar to our ears, and which clearly indicate their temperament? Why, at the sound of the swarming note from one colony, will another suddenly take a notion to swarm? and how does a band of scouts lead off a swarm to the location they have previously chosen? Wherever be the location of their ears, it seems to me that bees must hear, or be conscious of sound, and that is what we call hearing. If they do not hear, will some one please explain?

ROBERT H. WILLIAMS.

Beatrice, Nebr., June 30, 1892.

Nearly 135 Pounds Per Colony.

I had 60 colonies of bees in March, and have 78 now. I have taken 8,024 pounds of honey, about 1,000 pounds of it being comb. I sell extracted honey at 5 cents per pound, wholesale. I sold 5,191 pounds of it to one firm, delivered six miles from here. I am losing a large amount of bees by the trembling disease; they hop off, grasshopper fashion. The above honey is mostly from orange bloom.

P. W. MCFATRIDGE.

Ontario, Calif., June 27, 1892.

Queens Piping Before Swarming.

On page 22, Mr. George F. Evans asks the meaning of several queens piping before the exit of a swarm. Is it anything different from the ordinary programme at the time of the issuing of any second swarm, or when the old queen has been lost, and a swarm issues on the maturity of a young queen? In such a case, one queen is running around in the hive piping in a shrill tone, while another, or perhaps several answer back from their cells in a coarser tone. This noise made by the queen at large is called "piping" or "teeting," and the noise made by those in the cells is called "quahking." At least those names were formerly used, and they apply very well now.

Put your ear against the hive of any strong colony that cast a swarm about two days ago, and if a second swarm is to issue, you will hear the plping and quahking. C. C. MILLER.

Marengo, Ills., July 6, 1892.

Red Ants—Good Honey Crop.

I have been rid of red ants since February, by keeping chickens in my apiary of 33 colonies. My bees wintered well, and I am getting a good crop of honey from sourwood and white clover. We have had no early honey nor honey-dew.

JOHN F. HAEGER.

Hill City, Tenn., July 2, 1892.

My Experience in Bee-Keeping.

I commenced bee-keeping eight years ago, and now have 32 colonies. My first swarm issued on June 19, and I have had several since that time, but have put them back, and put on guards to keep the queen in. I would like to know if bees will do well with entrance guards on their hives. This is the first year that I have tried them. If they will do as well with them on, it will be quite a help if put on in the right time. I do not expect much from my bees this year, as it rains almost every day. I have but 2 or 3 colonies that have done anything in the sections. If it keeps on raining next week as it has in the past, I think I shall have to feed them. I had 21 colonies in the spring, bought 20 more, and had to transfer 14 of them. The first 9 that I transferred did well, and 4 out of 5 of the last that I transferred on May 30, as it was quite warm, left the hive entirely, and I lost 3 out of 4. One of my neighbors got them. I was told that he had it in a box, and I had to give him one dollar for his trouble. As part of my bees are kept from home, I have used guards on the hives since that, and I do not see but they are doing as well as my bees kept at home. I would like to know what made the bees leave, as I have transferred quite a number of swarms before, and have been successful with them. It was so warm that the comb broke down some, and they were working on apple-blossoms quite freely.

I am much pleased with the BEE JOURNAL, and wish that I had taken it before. I see my neighbor Doolittle's name often in it. I live about eight miles from him. All bee-men in this section think that he is as good authority as we have. W. F. MILLIER.

Mottville, N. Y., July 4, 1892.

Dead Drones and Virgin Queen.

On page 21 Mr. George F. Evans mentions finding a dead virgin queen in front of a colony that had not swarmed. Probably the dead queen was a stranger from some other apiary, that was lost on her wedding trip. I have had this happen in my apiary. I never knew of sister queens making war upon each other in the parent colony after they were hatched. Last season I even found six live queens in a swarm in the morning, which had been hived nearly 24 hours.

Probably a small nucleus would cast a swarm in the swarming season if two queens were hatched exactly at the same time. If virgin queens fought in the parent colony, we would hardly see swarms of a quart or two issuing from colonies in large hives that were already weakened by casting too many swarms. Those dead drones might have been taken from the combs when ridding them of worms. J. H. ANDRE.

Lockwood, N. Y.

An Encouraging "Stray Straw."

There is an old saying, that "drowning men catch at straws." I was just on the verge of despair when I received *Gleanings* of July 1, and in reading "Stray Straws," I noticed these words from the pen of a worthy brother and ready writer, Dr. C. C. Miller—"Don't get clear discouraged; I've known seasons a good deal worse than I think this will be." Now, are not the Doctor's hopes strong?—"think this will be." There is almost too much territory un-

solved here. Can you ever remember when on July 4 there was not a pound of honey in many of the hives (save what you had fed the night previous), and strong with bees? Think for a moment—no stores, and no surplus on July 4. These are the conditions of the writer's bees at the present time. But three days in June and two days in July thus far, in which bees could do anything. Despair and famine stared me in the face, and seeing Dr. Miller's words of encouragement, I immediately ordered a barrel of sugar, and continued feeding. See what virtue there is in "Stray Straws." Thanking the Doctor for the words of encouragement, I shall in the future (if successful in this) ever be a thorough peruser of the AMERICAN BEE JOURNAL and "Stray Straws."

A. Y. BALDWIN.

De Kalb, Ills., July 6, 1892.

Very Wet Season.

Bees have not done very well thus far. Basswood is to blossom some, and we hope for some honey from it. June was one of the wettest on record—but eight days that it did not rain.

W. H. SCOTT.

Barre, Vt., July 4, 1892.

COMBED AND EXTRACTED.

Bees as Weather Indicators.

An old apiarist, who has been a close observer of the habits and movements of bees, declares that bees are quite reliable weather indicators. He says that if the day is to be lowery and wet, the bees will be sluggish, stupid and inactive in the morning, while on the contrary, if the day is to be bright and fine, they will be full of life and activity.—*Selected.*

Good Prospects for a Big Crop.

The losses of bees the past winter and spring make the bees that are left of double value, and each owner of one or more colonies should aid the bees with food, if necessary, to enable them to become strong in numbers as early as possible. Swarming will be late this year at best, but the prospects for a big honey crop are in many respects the best for years. The wet weather started an extra heavy stand of white clover, and all kinds of blooming plants that yield honey, and this will probably be a year for a big basswood bloom. So let us get everything ready, and we will score a victory, as honey is sure to bring a good price.

Since writing the above, we have been walking in the bee-yard, and the sight presented to-day (June 4) is most inspiring; the sun is shining, and the bees are bringing in both pollen and honey at a great rate. Many of our colonies are very strong, and we expect to report a big yield this fall.—B. TAYLOR, in the *Farm, Stock and Home.*

Shade Important for Bees.

Bees get heated in the excitement of swarming, and like a cool, shaded hive. If the sun shines hot upon it late in the afternoon, they will desert it. One day a large swarm was hived in our apiary, and placed under the shade of a large cherry tree. The next morning was very hot, the sun shone upon the hive, and the bees came out and left. It is not only necessary to place bees in the shade, when they are first hived, but to keep them shaded until they are firmly established in their new home. If they come out, try by all means to learn the cause, and remove it if possible.

Where there is a spraying outfit at hand, it might be used in wetting down bees, to prevent their absconding. A farmer acquaintance has a few colonies of bees, located near large oak trees. These trees make a great deal of trouble during swarming, as the bees clustered in their tops. Now when a swarm issues, he throws water upon them. This causes them to cluster low down. A spray of water can be used to good advantage to prevent uniting.—MRS. L. HARRISON, in *Orange Judd Farmer.*

To Quiet Bees When Swarming.

One of the best and most effectual ways of handling a swarm of bees when swarmed or settled, is to give it a good sprinkling with a watering can. After that a person can handle them with satisfaction.—*National Stockman.*

A Prayer delivered at the handle of a sharp hoe, kept in rapid motion, will keep the weeds out of your garden.

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Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

Premium to Every New Subscriber.—We will *give* to every new subscriber (with $1.00), for whom it is desired in place of getting any other premium we offer for work done, a copy of "RURAL LIFE"—a valuable pamphlet of over 100 pages, devoted to "Farm Topics, Live-Stock, Poultry, Bees, Fruits, Vegetables, Household, Home, and Miscellaneous Matter." Or we will send it, postpaid, for 25 cts. This is a rare chance for new subscribers to get some excellent reading for nothing—by sending $1.00 for one year's subscription to the BEE JOURNAL.

A Year's Numbers of the AMERICAN BEE JOURNAL contain over 1,650 pages—what a wonderful amount of bee-literature for only $1.00! Could you afford to do without it at that price—2 *cents per week?* Send us the names and addresses of your bee-keeping friends, who do not receive the BEE JOURNAL, and we will mail them sample copies. We want every bee-keeper in the land to see it, and know of its value as an "assistant" in the apiary.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—Everybody to send me 10 cents in exchange for my little book, "The A B C of Ferret Culture." It tells all about the care and management of this little animal.
25Atf N. A. KNAPP, Rochester, Lorain Co., O.

WANTED.—Those having small sums of money "saved up" can find perfectly SAFE investments, at 7 per cent. interest, for long or short time, by writing to
THOS. G. NEWMAN,
199 Randolph-st., Chicago. Ills.

NOW—If you want Pure Italian Queens, send for my price list. Send now.
H. M. STEPHENS,
1A4t Munden, Republic Co., Kan.

WANTED TO EXCHANGE—My new price-list of Italian Bees, White and Brown Leghorn Chickens, White and Brown Ferrets, and Scotch Collie Pups—for your name and address on a postal card. N. A. KNAPP,
25Atf Rochester, Lorain Co., Ohio.

HONEY AND BEESWAX MARKET.

CHICAGO, July 9. — Comb honey is dull and no demand. Selling finest grade white at 15c. With new crop prices will rule firmer. Extracted is scarce and in good demand at 7@7½c. Beeswax, selling at 26c.
S. T. FISH & CO., 189 S. Water St.

NEW YORK, July 9.—No comb honey selling. Extracted, new Southern, choice, 65 to 70 cts. per gallon.; common, 60 cts. per gallon. Beeswax—26@28c., according to quality.
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., July 9.—The old crop of comb honey is all cleaned up. First shipment of new comb honey this week, which we quote at 16c. for No. 1-lbs.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, July 9. — Demand is good for extracted, slow for comb. Supply good of all kinds, Comb, 11@14c. Extracted, 5@8c. Beeswax is in fair demand, at 25@27c. for good to choice yellow. Supply good.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, July 9.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6@7c.; buckwheat, 5@5½c.; Southern, 65@75c per gal.; Calif., 6½@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c more per lb. for extra select.
CHAS. ISRAEL & BROS., 110 Hudson St.

ALBANY, N. Y., July 9. — Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.
H. R. WRIGHT, 326-328 Broadway.

DETROIT, July 9.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.
M. H. HUNT, Bell Branch, Mich.

CHICAGO, July 9.—Very little choice comb on market; demand equals supply; sells at 13@15c.; dark, 10@12c. Extracted, very scarce; good demand; white sells at 7@8c., dark, 6@7c Beeswax is plentiful, fair demand, 25@26c.
J. A. LAMON, 44-46 S. Water St.

MILWAUKEE, July 9.—Demand very moderate, supply average of all grades but common quality. Best 1-lbs. 15@16c; common, 12@13c. Extracted, white, in barrels, 7c.; in kegs, 7½c; in pails, 7½@8c. Beeswax—demand fair, supply small. Price, 23@28c.
A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO, July 9.—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax —24@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street.

NEW YORK, July 9.—Demand is light, and supply large, except buckwheat comb. We quote: Fancy white comb, 12@14c; buckwheat, 9@11c. Extracted—Clover and basswood in good demand at 6½@7c; buckwheat ind emand at 5@6c. Beeswax in fair demand at 26@28c.
F. I. SAGE & SON, 183 Reade St.

CHICAGO, July 9. — Selling slowly, trade being in strawberries and other small fruit. No fine comb honey on the market—it would bring 15@16c. Extracted, 6, 7 and 8c., according to quality and kind. Beeswax, 27c.
R. A. BURNETT, 161 S. Water St.

BOSTON, July 9.—Demand is light. White 1-lbs., 13@15c. No 2-lbs, on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.
BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS, MINN., July 9.—Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.
STEWART & ELLIOTT.

KANSAS CITY, Mo., July 9.—Old honey is cleaned up, both extracted and comb. New crop will be in about July 10, here.
HAMBLIN & BEARSS, 514 Walnut St.

NEW YORK, July 9.— Demand moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 120 Pearl St.

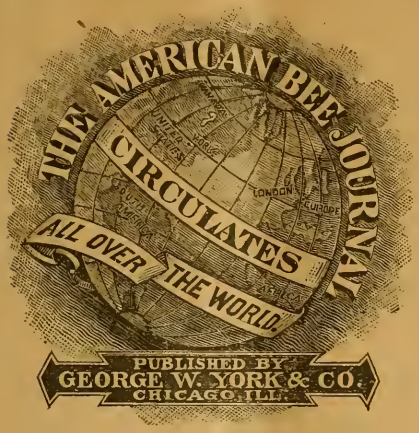
Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

We Club the AMERICAN BEE JOURNAL and the monthly "Illustrated Home Journal" one year for $1.35; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for $2.10.

The Honey-Bee; giving Its Natural History, Anatomy and Physiology. By T. W. Cowan, editor of the *British Bee Journal*, 72 figures, and 136 illustrations. $1.00. For sale at this office.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

The Busy Bees, and How to Manage Them, by W. S. Pouder. Price 10 cents. For sale at this office.



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Club Rates.—Two copies, **$1.80**; 3 copies, **$2.50**; 4 copies, **$3.20**; 5 copies, **$3.75**. Mailed to any addresses.

THOMAS G. NEWMAN, GEORGE W. YORK, } EDITORS.

Vol. XXX. July 21, 1892. No. 4.

EDITORIAL BUZZINGS.

"**The Seeds** we have sown with an earnest will,
Though among the thorns they fell,
The harvest may bring for the reaper's hand.
The result we cannot tell."

Ants, it is said, are abated as a nuisance in an apiary by scattering fresh lime around the hives.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 101.

The Guadaloupe Bees, an exchange says, store their honey in bladders of wax about as large as a pigeon's egg, and not in combs. The bees have no stings, are small, and of a black color. The honey is of the oily consistency, and never hardens.

The Weather and honey prospects in England, the past few weeks, is thus written about in the *British Bee Journal* for June 23, 1892:

British bee-keepers still have much to be thankful for, though not quite so warm as we could wish for a few days. Since we last wrote there has been sunshine enough to keep bees going on fairly well, and a very satisfactory quantity of early honey has already been secured. The "Royal" show will have tested its quantity, as well as its quality, before these lines are read, but it is a good sign, when we hear of several beemen having got off sufficient to complete their entries for the exhibibition, and that it will certainly be staged. Thus far, then, the weather has been kind to us; how long it will last, it is hard to say.

From all quarters come encouraging reports of the outlook; bees in the south have done very well indeed for a fortnight past, and are now gathering honey well on towards the north, so that after all we may expect colonies to be at work in supers all over the country by the third week of the present month. Swarming has not been excessive so far, and altogether there is every hope of a good and profitable season.

The Michigan State Fair, Department of Bees and Honey, have made some changes in the premium list for this year. Mr. J. H. Larrabee, of Agricultural College, Mich., writes as follows about it:

I wish to call attention to several changes in the premium list of the Michigan State Fair, Department of Bees and Honey. Entries close Sept. 2, 1892. All honey is to the product of the exhibitor, and this year's crop. Some premiums have been altered, and a third premium has been added to the whole list. It is hoped there will be a larger exhibit by new men this year.

J. H. LARRABEE.

By Return Mail — Beautiful Queens of the 5-banded variety. Don't miss this chance. One untested queen in July, $1.00; 6 for $5.00. August or September, 1 untested queen, 75 cents; 6 for $4.00. — J. F. Michael, German, Darke Co., Ohio.

Much Appreciated have been the many words of sympathy and congratulations which have come to us out of the great kindness of heart which abounds among all the bee-fraternity. As said before, we cannot publish them all, but can only express our sincere thanks for the kind expressions, and give place but for a few in the BEE JOURNAL.

Mrs. L. C. Axtell, of Roseville, Ills., who has for years been one of our pleased readers, wrote as follows on July 9, 1892:

I was sorry to hear of Mr. Newman's poor health and withdrawal from the BEE JOURNAL. Yet I am glad it has fallen into so good hands, for I see it is still spicy and good, and should be read by all who keep bees. May you be prospered, is our wish.

MR. & MRS. L. C. AXTELL.

Mrs. W. C. Steddom, of Oregonia, O., on July 8, 1892, expresses herself in these encouraging words:

I was quite sorry indeed to learn that Mr. Newman had sold his interest in the AMERICAN BEE JOURNAL, but as it comes to our home every week in the same pleasing style, and is read with the same interest, I feel assured that it has fallen into good hands. That Mr. Newman may soon regain his health, and have a long and happy life, are the earnest wishes of

MRS. W. C. STEDDOM.

From across the Atlantic also have been received heartiest words of sympathy, and wishes for the continued prosperity of the AMERICAN BEE JOURNAL. Mr. William Carr, of Manchester, England, wrote thus on June 29, 1892:

I was very grieved to see that, through Mr. Newman's continued ill-health, he had sold the BEE JOURNAL. I do hope, and will pray to God, that he may soon be restored to good health again, which is the greatest blessing we can have on this earth; and that if I should be able to come to the great World's Fair next year, I shall find him quite restored to health. I am very much pleased to know there will be a grand apiarian exhibition at the World's Fair.

I sincerely wish Messrs. George W. York & Co. every success in their undertaking, and I will do all I can in this country to assist them.

I often look at Mr. Newman's photograph, taken at Mr. Cowan's house on July 28, 1879, and I have shown it to numerous friends, and told them about the AMERICAN BEE JOURNAL. I wish to thank Mr. Newman for all his kindness, and sincerely wish him every happiness he can desire. WILLIAM CARR.

Where to Keep Honey.—The *Indiana Farmer* gives the following advice on the keeping of comb honey:

Do not on any account store honey in a cellar. The dampness causes it to sweat, and then the cappings will break, and you have a lot of ruined honey. Our honey room is in the second story of our house, and will hold two tons. It is six by ten feet, and nine feet high, with two doors—one on each side—one opening from the hall, the other opening into a room over the porch. This room has one window. Here we put our honey first to let it harden, keeping the room light.

After exposing it to the light for about two weeks, we place it in the honey room. Never on any account place more than two boxes on top of each other, but place shelves above each other on the order of a library.

If little red ants bother the honey, place the honey on a bench, and put each leg or foot in a pan of water, and my word for it, if you keep water in the pans no ants will bother the honey. Our honey room is as dark as anything can be made to be, writes a bee-keeper in an exchange.

Music will be one of the delightful attractions at the World's Fair. Accommodations for musical entertainments have been decided upon, and the construction of the necessary buildings has been ordered. They include a recital hall, seating 500 people; a music hall, with accommodation for 120 players, 300 singers, and an audience of 2,000; a festival hall for performances upon the largest possible scale, with 200 players, 2,000 singers, and an audience of 7,000. The music hall will contain a fine concert organ, and in festival hall will be placed an organ for chorus support.

Nameless Bee-Disease.—Mr. Jacob Moore, of Ionia, Mich., wrote us as follows on July 6, 1892, about the peculiar actions of his bees :

My bees have something the matter with them, and I cannot tell what it is. In the morning they will come out and seem powerless to fly, but scamper away from their hives and die. They do not seem to be bloated, and they cannot be old. All the colonies seem to be alike—27 in number. What is the trouble, and what is the remedy? Bees have gathered but little honey up to the present time, but they are gathering now.

JACOB MOORE.

Upon receipt of the foregoing, we referred the matter to Prof. Cook, who gives his opinion thus :

If there were any flowers now out that were likely to be sprayed with the arsenites, I should think that Mr. Moore's bees had been poisoned. It does not seem a typical case of the "nameless bee-disease." It may be the malady in a modified form. I suggest that he give salt water liberally, and if no improvement is observed, to replace the queen with a new one. I believe that Dr. Miller has no faith in this cure ; but so many have reported to me success by its adoption, that I am disposed to think it effective. I have never had occasion to try it personally.—A. J. COOK.

Bees in a Candy Store.—In a recent issue of the Utica, N. Y., *Globe*, was an account of some bees, that, being attracted by sweets, invaded a confectionery store in New Brunswick, N. J., last month. The lively experience had with the bees will not soon be forgotten by those who occupied the store. Bees generally seem to "want the earth," and almost as frequently they get it, too, without much opposition on the part of some people. The following is the item referred to :

A few bees, apparently attracted by the odor of sweets, entered the confectionery store of Frank T. Theburg last Friday. Mr. Theburg and his clerk were behind the counter, and in a rear room four men were at work making fresh candy. The bees were "shooed" out without difficulty, but it would appear that they were only a prospecting party. About 10:15 o'clock a very large swarm entered the rear room through a window. The men then fled into the store. Mr. Theburg hurried around the counter to close the window in the rear room, but when he reached the doorway he could hardly see the window. The room was black with bees. His employes in the store were lashing towels furiously to right and left, but the bees only buzzed the louder, and stung the harder, and soon all the men rushed into the street.

On Saturday some one told him that if he caught the queen-bee and took her out, or killed her, the rest would leave the place.

"George," he said to his clerk, "go and catch the queen-bee."

George did not do so. On Saturday, ordinarily the busiest day in the week, no business was done. Yesterday Mr. Theburg began to burn sulphur. He bought a pile of it, built a fire in a big can, and put the sulphur on it, made a wild rush into the rear room, with his face and hands protected, set the can on the floor, and flew out again. This morning he filled a small box with the dead bees he found on the floor. There are still several hundred crawling about in the show-windows, but the floor is strewn with dead bees, and those that still crawl will die within a few days.

Two of the Cannon, which, it is believed, were at one time mounted on board Christopher Columbus' flagship, were received at Chicago recently. The cannon are of the ancient and clumsy pattern of such guns turned out in the fifteenth century. Nothing but the body of the guns remains, the woodwork, of course, having rotted away centuries ago. The guns themselves are almost worn to pieces, and are not much more than huge chunks of rust. Indeed, the cannon are put on the "scrap iron" list in the Custom House papers. These historic old pieces have been secured for exhibition at the World's Fair. One of the naval officers who was detailed for work in connection with the Columbian Exposition, found the relics at one of the West Indian islands. Tradition and substantial proof showed that the cannon had been used in a fort erected by Columbus' son, and that they were brought from Spain with Columbus' fleet. The ruins of the fort are still to be seen.

Don't Fail to read all of page 101.

Getting Bees Out of Supers.—Mr. Alfred Rusbridge, of Chichester, England, author of a book on "Bee-Keeping; Plain and Practical," sent us, on June 23, 1892, the following about removing honey from the hives, and getting the bees out of the surplus arrangements, which will be very timely now:

Favored by the fine spell of genial weather prevailing since the flowering time of the fragrant hawthorn, or May-flower, bees are filling the supers in a manner alike creditable to their habits of industry and perseverance, and gratifying to their owner. To an enthusiastic apiarist, whether he be a novice or á veteran, a pile of well-filled supers on the hives in his own apiary, is a sight delightful to contemplate; the whole process of comb-building—so wonderfully and beautifully done—being expeditiously and most artistically "executed on the premises" by his own staff of exceedingly clever artisans, good templars one and all, who toil merrily in their vocation, the livelong day, week by week the season through, without pay, and without any thought of striking for an eight-hour working-day!

My aim is to show the inexperienced bee-keeper in the simplest possible manner, how to dispossess his bees of their surplus honey, stored in the supers, without trouble, and, what is more to the purpose, without danger of getting stung in the process.

In the height of summer, the best time for removing supers from the hives is either early in the morning, say before 8 o'clock, or, if this time of day be not convenient, late in the afternoon. Let us take our station at the rear of the hive to be operated upon. Don veil and gloves, and you are sting proof. A few simple articles are requisite, *i. e.*, fumigator, Aston's bee-trap, attached to a shallow wooden tray, and four wedges, each nine inches long by an inch broad, tapering from an inch in thickness to a point. Shorter wedges are very liable to slip in the process.

The fumigator being in readiness, we first of all pry the supers gently up from their attachment to the top of the hive (a putty knife is most suitable for the purpose) sufficiently to insert the wedges at the corners. These we gradually push in, meanwhile briskly plying the fumigator around to drive the bees inwards. Alarmed at the sudden invasion of smoke, they are rushing panic-stricken from the top of the hives downwards into the brood-combs. A few seconds pass, and the whole pile, 60 pounds weight at least, is then lifted bodily off, and placed on top of the tray close by. The only outlet from this is through the bee-trap attached to the side. Tiny slips of talc close its half-dozen apertures. These yield to the slightest pressure from the inside, and once outside the bees cannot possibly re-enter.

If the queen is not in the supers (and she is generally absent, as a rule), the bees soon miss her and become excited, and commence humming loudly. Ere long they fairly stream out of the outlets of the bee-trap. By the evening, or the next morning, as it may be, the super is cleared of every bee.

But, on the other hand, if the queen chance to be present in the supers at the time—which contingency may possibly happen, say once in a dozen instances—the bees are then very loth to quit. In this case, allow the supers to remain undisturbed on the tray for another day, by which time the major portion of the bees will have quitted it for the purpose of their usual daily foraging in the fields, entering the hive (and not the supers) on their return home. Apply to the latter a little extra fumigation, after which carefully remove the honey-combs, one by one, and as soon as the queen is seen (her majesty is easily recognized by her long, tapering body) gently brush her off with a feather at the hive entrance.

It is well to have an empty super in readiness close at hand (unless the season is over), to replace the filled ones as soon as the latter are removed, as, during the honey-gathering season every day is of importance.

The material which I invariably use for fumigating purposes, consists of a sugar-bag previously well cleansed and dried, cut up, and rolled into pieces the size of sausage. It is very effective, perfectly harmless to the bees, and leaves no unpleasant odor behind.

In June more than 90,000 people, or a daily average of 3,000, visited the World's Fair grounds and paid 25 cents each to see the sights. The largest attendance on any one day was 12,038, on May 29.

Be Sure to read offer on page 101.

The Axe-Covered Grindstone.

Though bright to my heart are some scenes in my lad-time,
Which fond recollections present to my view,
One thing I remember that brought me no glad-time.
But lent to my childhood an indigo hue.
How awful when sneaking away from my mother,
As down to the creek with my tackle I fled,
To hear father's voice, "One good turn needs another;
Come, turn at the grindstone that hangs by the shed."
The old crooked grindstone,
The wobbling old grindstone,
The old squeaking grindstone that hung by the shed.

Ah, many's the hour I've turned it and grunted,
For it was the millstone that burdened me down;
While nuts were to gather, and squirrels to be hunted,
There was always an axe or a scythe to be ground.
It never was oiled, and was hard in the turning;
"Only grease of the elbow it needs," father said,
And the handle would often slip off without warning,
And instantly tumble me heels over head.
The old dented grindstone,
The worn away grindstone,
It gathered no moss as it hung by the shed.

"This stone," father said, "like earth turns on its axes,
But comparison fails on the matter of force."
I said, "Though the speed of the earth ne'er relaxes,
I am sure it would stop 'neath those axes of yours."
The nicks they were deep in the axe or the hatchet,
And father bore on till sweat dropped from his head;
If I'd pause to put water on them I'd catch it.
"Watch the crank and keep on with the motion," he said.
Oh, that old shady grindstone,
That slow-grinding grindstone,
That hard-running grindstone that hung by the shed!

Yes, dear to my heart are some scenes of my childhood,
The orchard, the cider, the neighbor's peach trees,
The school-hours I pleasantly passed in the wildwood,
And the honey I stole unbeknown to the bees,
But that circular horror, whose motion was rotary,
To-day makes my anger all fly to my head,
And I'm willing to go and make oath to the notary,
That I was ground dull by that stone by the shed.
That lop-sided grindstone,
That old hated grindstone,
That confounded grindstone that hung by the shed. —Western Plowman.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

California Bee-Keepers are about to receive some deserved recognition at the hands of the Government. Mr. C. N. Wilson, in the *Rural Californian* for July, writes thus concerning the prospects in that line:

"At last the State University officers are giving some attention to apiculture, and a good beginning in scientific bee-keeping will, no doubt, soon be made at the University. So far as we know, none of its officers, either regents or faculty, have any practical experience in apiculture, and it may be necessary to do as has been done at the Michigan State University; that is, secure the services of a practical bee-keeper to take charge of the work; that institution has an apiary of its own, and Mr. J. H. Larrabee, an experienced bee-master, is in charge. Prof. A. J. Cook has heretofore given much attention to the work in the apiary, and written and published a work on bee-keeping that is a credit alike to himself and the institution with which he is connected. His experiments have been of great value, so much so that the Department of Agriculture at Washington has given the matter attention, and now the expenses at the University are provided for wholly, or in part, by the United States Government.

"If the expense to our University is an item in the account, it is possible we may induce the Agricultural Department to do as much at least for apiarian interests on this coast as has been, or will be done by it east of the Rocky Mountains.

"Our climatic conditions and indigenous growths of nectar-producing plants are in most respects different from anything in the East, and a different line of experiments are required to get at the best results. At any rate, the University officers will take some action."

When You Have any honey to sell, get some Honey Almanacs and scatter in your locality. They will sell it all in a very short time.

QUERIES AND REPLIES.

Pounds of Beeswax from One Hive.

Query 828.—How many pounds of beeswax can be rendered out of the combs of one dovetailed hive, with a solar wax extractor?—Subscriber.

Various amounts, according to age, condition, etc.—J. M. HAMBAUGH.

With old combs I do not think you will get more than one pound.—H. D. CUTTING.

From one to two pounds, according to age and condition of combs.—JAMES HEDDON.

If new combs, perhaps 2 pounds; if very old comb, not over ½ pound.—G. L. TINKER.

I have never used a solar extractor; probably from 1½ to 2 pounds.—MRS. L. HARRISON.

I do not know. Much would depend upon the age and condition of the combs.—M. MAHIN.

It depends upon how many combs, what size of combs, and how old they are.—DADANT & SON.

About one pound from an eight-frame Langstroth hive (whether dovetailed or not).—MRS. J. N. HEATER.

One pound, more or less, depending somewhat upon the age of the combs, and the thoroughness of work.—EUGENE SECOR.

I do not know, as I never tried it. I should think about one pound, or a little more, would come out of eight combs.—MRS. JENNIE ATCHLEY.

It depends upon the state of the combs. If in a good condition, about two pounds. If filled with pollen, cocoons, etc., if you get ½ pound you will do well.—G. M. DOOLITTLE.

That would depend upon the age of the combs. Old combs with the cells filled with the cocoons of the larvæ of the bees will not yield as much wax as new combs.—J. P. H. BROWN.

That will depend upon whether foundation is used, if it is light or heavy, or whether the comb is made by the bees; the more brood there has been reared, the less wax can be secured.—A. B. MASON.

I do not know. I never used the dovetailed hive, or the solar wax extractor. This question is not very clear. You do not say how many stories high—there may be 10, 20 or 30 combs.—E. FRANCE.

I once rendered a lot of such combs in a wax extractor, and got very near two pounds from eight combs, on the average, and I suppose a "solar" would do as well. But combs are not alike.—R. L. TAYLOR.

I have never tested the matter, but I do not see why more or less could be taken from a "dovetailed" than from any other hive. As nothing is said about size, the query reminds me of "the old chestnut," viz.: "How big is a piece of chalk?"—J. E. POND.

All that there is in it, which will depend upon the completeness of the combs. A large solar wax extractor, such as Mr. Larrabee now has in the College apiary, is a most excellent adjunct to any bee equipment. The one here is mounted on two old tricycle wheels, and is very convenient.—A. J. COOK.

Your question is too indefinite to hazard an answer. You do not give the size and number of the combs, and I know of no hive in general use that is put together with the joint known by mechanics as "dovetailed work." I have noticed, when rendering combs with my solar wax extractor, that combs of the Langstroth size will yield from 2½ to 3 ounces of clean wax per comb. Combs of the same size vary considerably in the amount of wax they contain; some sets of combs of the Langstroth size average over 3 ounces per comb.—G. W. DEMAREE.

Much more will depend upon the age of the combs than upon whether the hive was dovetailed or nailed together. You will do well to get about one pound from an eight-frame hive of ordinary combs.—EDITORS.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 101, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Read our great offer on page 101.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Fruit-Raising with Bee-Culture, Etc.

G. M. DOOLITTLE.

I have been asked some questions, which I will answer in the BEE JOURNAL.

Question—As bee-keeping, or the profits from the same, seem to be uncertain of late years, how would it do to combine small fruit-raising with the same?

Answer—There is only one part of the small fruit-raising that can be combined with bee-keeping to advantage, according to my opinion. Of course, I would advise all to raise enough small fruits to supply the needs of the family, but if sufficient fruit is raised to make a financial success out of the sale of the fruit, the financial part of bee-keeping will suffer just in proportion as the financial part of the fruit increases, as the picking and marketing of the fruit comes right at a time when the bees need the most attention. If the bees are properly attended to, the fruit will be neglected, and if the fruit is properly attended to the bees would be neglected.

But there is a part of the small-fruit business which can be made profitable in connection with the bee-business, and that is the sale of plants. As this part of it comes in early spring, so far as digging and shipping plants is concerned, it does not interfere in the least with the bees, for at that time they are in the cellar, or require little if any attention when out-doors.

Then, again, the rooting and caring for the plants comes mainly in August, after the hurry with the bees is over, so that it can be done about as well as not, by the man who wishes to economize all of his time, while the covering and fixing for winter comes at a time when there is nothing at all, practically speaking, to do with the bees.

That this plant business, as above, can be made quite profitable will be seen, when I say that, with very little effort, I did a business on this alone a few years ago, amounting to $150 a year. When I gave up the subscription business, I dropped plant-selling also, being obliged to do less work along these lines after the care of my father's estate fell upon me.

Notwithstanding what I have said about the plant business above, if I were to choose any business to go with bee-keeping, it would certainly be farming, for the reason that this gives steady employment nearly all the year, especially where stock is raised. At the times where more is to be done along both lines than the bee-keeper could attend to, a man capable of doing farm work could be hired very easily; while hired help along other lines, which would be satisfactory, is something not easily obtained.

SWARMING WITHOUT A QUEEN.

Question—Last year I was troubled with excessive swarming, and it seemed to me that some colonies of bees swarmed without queens. Do bees ever swarm without a queen to go with them?

Answer—Most of the authorities say No, and so I would have once said, but to my certain knowledge I had one swarm that came out without any queen with them. It happened on this wise:

Early one morning I wished to use a queen, and so went to a hive which had a rather smallish colony of bees in it, and took away the queen they had. From a change of queens, made a few days before, this colony had only sealed brood from the previous queen, and only eggs from the queen now took away. Near noon of this day several swarms issued together, and circling around came over this hive from which I took the queen in the morning, and very much to my surprise this colony began to swarm, and to all appearances issued the same as any swarm having a queen.

I then thought, and still continue to think, that these bees knew that there were several queens in the air, and not being satisfied with the condition their hive was left in, they swarmed out similar to bees do in early spring when they get in a demoralized condition.

PREVENTION OF AFTER-SWARMS.

Question—Will the cutting out of all queen-cells but one prevent after-swarms? Last year I did this on several colonies, and then I had them swarm out until there was hardly a quart of bees left.

Answer—The trouble here was, that the queen-cells were not cut at the right time, for the cutting of queen-cells can be done so as to make a success of it, or a complete failure. By the old plan of waiting five or six days after swarming, or from the time a queen has been taken away from a colony, it was nearly

always a failure, for in this case the bees have plenty of larvæ that were still convertable into queens, and the question of swarming was only delayed a few days longer; *and as* this delay only gave them more strength, of course they would swarm all the more.

Years ago when I tried this plan in proving what was correct in the "books," and what was not, I so cut the cells in a good colony five days after it had swarmed, when eleven days later, or sixteen days, dating from the issue of a prime swarm, a rousing second swarm issued.

Leaving them clustered on the limb, I opened the old hive, and by actual count there were 39 queen-cells in that hive which were built after I cut them out, the one left when cutting out before having been destroyed, and most of these had queens just ready to gnaw out. These were all clipped off, the queens in them being destroyed, and the swarm returned, with no swarming afterward.

From this I learned to wait eight days in case where a swarm had issued, and twelve days where the queen had been taken away, when, as a rule, the first young queen would be hatched, when a sure thing is made of it, both as to no more cells being built, and also in knowing that the colony would have a young queen, neither of which is sure by the old method.

In cutting cells at any time, it is always best to shake the bees off each comb as it is inspected, otherwise some cell is liable to be missed, in which case swarming is sure to result.

Borodino, N. Y.

Young Queens as Drone-Layers.

W. C. FRAZIER.

The communication on page 46 is interesting, but there are a few things in it to which I must take exception.

I am certain that I have had queens swarm naturally and not be superseded for more than a year after. However, as I do not let my bees swarm, I will leave this to some other to answer. But to the assertion, "Again, when a queen begins to fail, she begins to lay drone-eggs—a young queen never does." This I do not find to be correct. I have 20 young queens reared this season, whose worker progeny has not yet hatched, that have some of them more than a brood-comb full of capped drone-brood. It depends much upon the condition of the colony about the queen laying drone-eggs; these had been queenless long enough for all brood to be capped, and all drone-brood was destroyed; the young queens layed the brood-combs full of eggs as they came to them, and where there was drone-comb they filled it the same as the worker-comb.

In my colonies there is now but one queen that has not been reared this season; nearly all have had their queens "shipped" 24 days or more. Not ten of them have young bees hatched from this season's queens to-day, and I believe there is capped drone-brood, more or less, in 40 of them.

Atlantic, Iowa, July 9, 1892.

Prof. H. W. Wiley and Bee-Keepers.

PROF. A. J. COOK.

DEAR EDITORS:—Excuse me if I take considerable space in your excellent paper regarding a matter which is of no small interest to bee-keepers, and which well merits careful consideration.

In 1881, Prof. H. W. Wiley published an article in the *Popular Science Monthly* (Vol. XIX, page 252) in which occurred the following words:

"In commercial honey, which is entirely free from bee-mediation, the comb is made of paraffine, and filled with pure glucose, by appropriate machinery. This honey for whiteness and beauty rivals the celebrated white clover honey of Vermont, but can be sold at an immense profit at one-half the price."

Of course, this was entirely a fabrication. As our best informed bee-keepers knew then, and as thorough investigation has proved since, there was not a shadow of truth in any part of the statement. Yet Prof. Wiley had had the statement from an able, candid scientist, and believed it wholly true. He thought he was telling the truth, and, as is his wont, he put it in an interesting, not to say humorous, setting.

This article was widely copied, and from the well-recognized ability and high standing of its author as a chemist, it was generally believed. In these days of wonderful inventions, we can hardly blame either Prof. Wiley, or his readers, for such credulity. Thus the influence of the article was great, and its effect very serious to the bee-keeping interests. Bee-keepers had their comb honey refused, over and over, with the taunt that it was artificial.

Thus bee-keepers were hurt, and often, I dare say, indignant. They saw their business unjustly suffering, and seemed powerless to prevent the wrong. Prof. Wiley knew nothing of this, and so, when convinced of his mistake, would only regard it as a harmless error. Could he have known the real facts, I believe he would have been quickest to retract and correct.

Our bee-papers knowing, as Prof. Wiley could not know, the injury which the business had suffered, attacked Prof. Wiley in no mild fashion; in fact, about the most energetic language possible was made use of to designate his wrong doings. This led to Prof. Wiley's article in the *Indiana Farmer*. He had supposed the narration more of a joke than anything else, and so, misinterpreting the action of the bee-keepers, he did not reply, as he certainly would have done, had he appreciated the true state of the case. He had received no word or letter from any bee-keeper, but had only seen these attacks, and as he could not possibly understand the righteous indignation of bee-keepers, he penned the unfortunate letter to the *Indiana Farmer*.

Prof. Wiley regarded the attacks as violent and uncalled for, and so replied to the whole matter as though it were a joke—not a matter touching the real interest and prosperity of bee-keepers. Most of us mistook his phrase "Scientific pleasantry." We supposed that he meant that he published the first article as a joke, and not as a truth. On the other hand, when he published his first article he believed it wholly true, and of such interest that it would create wonder and provoke interest and merriment, hence his expression. Thus we see Prof. Wiley has not been untruthful, nor has he been even disingenuous.

Since these letters, Prof. Wiley has issued two Reports on honey adulteration. Without the least doubt, both of these Reports were the result of careful analyses, and as skillfully made as the present chemical methods will permit. If not wholly reliable, it is only because of the complex nature of honeys, and the want of sufficient research, and of consequent reliable methods for such analyses.

Prof. Wiley's Reports make it still more evident that extracted honey is largely adulterated, and so are most valuable. I regard Byron Walker as a very sincere friend of every bee-keeper in *showing* that wholesale adulteration is carried on in Detroit and Chicago. Prof. Wiley is helping on this good work. Adulteration of extracted honey is extensive. Let us hunt out the wrong doers. Prof. Wiley is helping us to do it. Now, what every bee-keeper should desire is, that we know just who is adulterating; and, to do this, we must have accurate methods to detect adulteration. Prof. Wiley will take hold with all his energy, backed up by the aid of the Government, to help us in securing such methods if they are not now in existence. He has no desire to do ought, to in any way injure the honest producer. He is very desirous to bring every adulterator —every abettor of fraud—into sure and speedy condemnation.

Therefore, brother bee-keepers, I urge in deference to our best interests, and to fairness to one of our ablest and most gentlemanly scientists, that we desist from any further criticism or attack upon the mistakes of the past; that we do not demean ourselves by further reference to the "Wiley lie," or "scientific pleasantry," but gratefully accept Prof. Wiley's promise of aid; and together work (and I believe it will be successfully) to throttle this horrid demon of fraud and dishonesty.

I wish to say that I have had full and extensive correspondence with Prof. Wiley in relation to this matter, and so I am sure that he is not misrepresented here in relation to it.

Agricultural College, Mich.

[Prof. Wiley is invited to further corroborate Prof. Cook's statements as to his (Prof. Wiley's) being anxious to sincerely aid bee-keepers in detecting adulterators of honey, by announcing such fact in the BEE JOURNAL, over his own signature; and also, we think, though somewhat late, it would help matters very much if he should now acknowledge his error in making the statement referred to by Prof. Cook, in 1881, and make suitable apology to bee-keepers for the same.

It seems to us, that such would be the honorable and manly thing to do, as it demeans no man to admit making misstatements unconsciously, and ask pardon for the same when proven damaging, as that is merely another way of saying that he is wiser now than before making such misstatements. In fact, it appears to us that such would be the only really conscientious way to conduct one's self after unfortunately being in such a position.—EDITORS.]

Standard Section Should Hold 16 Ounces.

C. L. BUCKMASTER.

On page 771, of the BEE JOURNAL for June 9, 1892, I find the criticisms of Mr. C. B. Jenks on the standard size of sections as advocated by me on page 670.

Mr. Jenks assumes that there is a standard section, and the people are familiar with that standard. This is not exactly true: yet, I know that the 4¼x4¼, of five different widths, is very familiar in the market, and I believe the 7-to-the-foot is the most frequently found. I have never used this size, but I do not believe it will contain, when separators are used, more than 9/14 of one pound. There are five of these sizes in the market, and they are all called "pound boxes" by the grocerymen, and are sold as such. Now, if all the comb honey were in the 4¼x4¼ section, there would still be no standard; and, many times, the narrow sections would be substituted for the wider ones.

It is a well-known fact that the producer of comb honey must sell his honey to the wholesale dealer. The crates of honey are placed upon the scales, and after deducting the weight of the crates, the producer receives the price of the net honey. Do you see that it does not make any difference to the producer whether his sections are full weight or short? But when the consumer, having bought of the retail grocer, weighs a section, and finds it short, he says, "What a fraud the bee-keeper is!"

I see Prof. H. W. Wiley, in Bulletin No. 13, of the United States Department of Agriculture, says that he was not able to find a full-weight package of comb honey among the very great numbers analyzed by the Division of Chemistry. While I feel that the Professor is a little too severe on some of our honey-producers, yet I believe he has told the truth about the packages of comb honey, and I believe that Bulletin No. 13 will do a great deal of good in the direction of establishing a standard package that will hold what it is sold for. The bee-keepers' associations of the United States should do something to establish a one-pound section.

The difficulty of making the change from the 4¼x4¼ section to a standard 16-ounce section I wish to explain.

This can be easily done by adding to the height without changing the thickness. This amount can be found by a proportion, *e. g.*: Assuming the 4¼x4¼x1⅞ holds ¾ of a pound, we have ¾ : 1 : : 4¼ in. : x in. From this we have x=5⅝ inches, which is the height of the 4¼x1⅞ to hold a full pound. This will add 1 5-12 inches to the height of the super. The putting on of this strip is the only expense of the change—about 2½ cents each. All the other furniture will do just as it is.

I think I have shown how the change from a short weight to a standard, honest 16-ounce package can be made with very little expense. This section being oblong, will easily distinguish it from those now sold; it will soon be sought for in the market, and the producer of it will be known as an honest man—"The noblest work of God."

Columbia, Mo.

The Clipping of Queens' Wings.

EUGENE SECOR.

I have had some experience this season that leads me to decided views on this subject. In years gone by I have practiced clipping, and the only reason I can give for discontinuing it is the time it takes to go through the apiary and perform the operation. I can see no other objection to it. I believe the queens live just as long, are never superseded by the bees because of it, and for record purposes are more valuable than perfect-winged queens. And when some swarms will persist in going to the top of the tallest tree in our yard (30 or 40 feet high), as they often do, I wish every queen in the lot was under easy control.

Some one may say, "Use queen-traps and catch them as they come out." These have never given me the satisfaction I could desire. If we knew with any degree of certainty when a prime swarm would issue, so that we should not have to obstruct the hive so long, they would do very well, barring their cost. The automatic swarm-hiver is another invention along the same line, and open to the same objections in a greater degree, and I have my doubts of its practicability.

The swarm-hiver, such as B. Taylor uses, will be a good thing, I believe, but of course there must be an attendant present to use it promptly, or that will be a failure. It is not always possible to have a person constantly in the yard during the swarming season. In a small apiary it would hardly pay to hire, and

the proprietor is often some distance away.

After practicing several methods other than clipping the wings of the queens, I am compelled to confess that I like the latter. Another argument in its favor is the certainty that swarms will not decamp. It will out-wit some of the wise ones who put out decoy hives to catch their neighbors' bees.

Of course, to get the full benefit of the system of clipped queens, the apiary will have to be so managed as to avoid after-swarms, as the young queens go further and alight higher than old ones.

With the Heddon method of hiving and after manipulation, after-swarms are reduced to the minimum.

Forest City, Iowa.

Late Season, Empty Combs, Etc.

C. H. DIBBERN.

The bee season, as well as all other seasons, is very late. During the cold weather in May we resorted to every method we could think of to induce the bees to build up, but it was a discouraging business. The feed we gave them only seemed to stimulate them to fly, when many would succumb to the cold, and never return. Now, what we have saved from the wreck are doing much better, and are building up very fast, and by the time clover is at its best, we hope to have most of the colonies booming.

SELF-HIVERS FOR SWARMS.

When we returned from the out-apiary a neighbor told us that while we were absent, we lost a fine swarm, as they had settled in a tree, but in a short time had disappeared. We had already noticed that one of the hives with our latest self-hiver on had swarmed, and when we answered that we knew that, and also where the swarm had gone, the lady seemed greatly puzzled. Then we told her about the hiver, and how nicely it is working for us this year.

We have had but few swarms so far, but we are just delighted with it. No more climbing of tall trees, with rope and ladder for us! We are getting good, fair-sized swarms, and by a little after manipulation, can fix them up just right. For another year we expect to have our hiver and system so perfect, that any farmer can use it successfully. What a relief this will be to the overworked farmer's wife and daughters, who in addition to their numerous cares and duties, are constantly cautioned to "watch the bees." Yes, and how many swarms will it save, that under the old plan, were soon over the hills and far away. Yes, sir, it is a success, and will surely revolutionize the industry.

TAKING CARE OF EMPTY COMBS.

What bothers us more than anything else is to take care of all the extra comb. We would like to save all, to hive the issuing swarms on, but the moths are getting pretty numerous, and so we will be compelled to render many into wax. At home we are trying the cold-water cure for the moth, with very good results. We have a tank near the honey-house, and whenever we see a comb infected, we submerge it, for two or three hours, and that fixes them until more eggs are laid, but by keeping a good watch they can be kept down. At an out-apiary we have not time to treat them in that way, and have resorted to fumigation with sulphur in the bee-cave. Somehow we never did succeed very well with sulphur on brood-comb. We will try again, however, and give them a good dose of it.

LATEST BEE-ESCAPE DEVICE.

Well, what about the bee-escape? Really, our bees have been "escaping" so fast of late that we have had no great need of it. The weather has been so unfavorable, and the season so late, that we have not yet been able to make all the test we wish before making our latest device known. We have an abiding faith, however, that it is all that can be desired, and far ahead of anything now out. If there is any honey crop to be harvested, we expect to be there with our bee-escape.

We have several other devices that we are experimenting with this year, and if we gain nothing else, we will gain some useful knowledge.

FAIR CROP OF HONEY EXPECTED.

According to all the latest bee-papers received, no great amount of surplus honey has been secured anywhere in the United States up to date. The season is generally very late, but with fair weather there is no reason why a fair crop of nice white clover honey should not yet be gathered. As the season is late in opening, it is reasonable to expect it to extend beyond the usual time. We have just returned from a visit to our out-apiary, and found the white clover coming out in fine shape. Some of the

hillsides have the appearance of being covered with snow. The strong colonies are also commencing operations in the sections.

Notwithstanding all our losses and drawbacks on account of the weather, we fully believe that we will secure a very fair crop of honey. If we do not secure it, then there is something wrong over which we have no control. Like producing a crop of anything else, we should do well our part, and trust the balance to the promise that "seed-time and harvest shall not fail on the earth."

DECOY HIVES FOR STRAY SWARMS.

Farmers and small bee-keepers usually lose quite a percentage of their swarms. These early swarms are the very bees that should gather the surplus crop, and the loss of them seriously affects the profits of the business. Our new swarmer and system, that we are now perfecting, promises to solve this problem completely. Then bee-keeping will be relieved of one of its chief sources of anxiety. But while so many swarms are flying around loose over the country, why not catch a few of them by means of decoy hives? If you have any old hives on hand, no matter if they are mere boxes, or even nail-kegs will do, put them up in good-sized trees in the woods. Also scatter a few through the orchard, or any place where the bees will be apt to find.

A comb or two, placed in the decoys, is a great inducement for swarms to take possession of them, and it is surprising how many of the decoys will find occupants during the swarming time. We manage every year to catch a number in this way, and while some may be our own, we feel sure that we catch more than we lose by desertion.

HAVE EVERYTHING NICE AND CLEAN.

If you are using hives full of comb on which the bees have died, to hive swarms in, be sure they are reasonably cleansed of dead bees and bad combs, also that they are not hopelessly infested by moth. Better melt up all such combs, and hive on nice sheets of foundation. In fact, it will pay to use good, heavy foundation to poor comb of any kind.

When surplus sections are put on the hives, be sure they are nice and clean, and that the foundation will not drop down as soon as the bees begin to hang on it. Better go a little slow, and have all in nice shape.—*Western Plowman.*

Rock Island Co., Ills.

Surfeit Among Bees that were Starved.

E. STRONG.

On page 9, I notice that Prof. Cook has given a little time to the study of a nameless or strange disease, of which there has been great complaint, for some years. He pronounces it a condition rather than a disease, and closes with this shrewd observation: "The appearance suggests a very meager diet."

I think he is right. I have for sometime regarded this trouble as surfeit, caused by bees being too suddenly "fed" when in a starving condition, and gorging themselves with too heavy and concentrated a syrup, or with old honey not sufficiently thinned.

My bees have not escaped this trouble, and doubtless all, at times, have had a touch of it. It is far from a pleasant sight, in the early part of the season, to see hundreds of bees, young and healthy, crawling away from the hive to die, slowly. Some will be two days in dying. A few seem to recover. I picked up half a tea-cupful before a hive, and took them in by the stove, and left them to warm up. They soon "came to," and were crawling all over, and you would say, "Put them into the hive, and they would be all right." But in a short time they again came out into the grass to die. This shows that they are not chilled bees, although they act some like it.

They look and *act* as though they *might* be poisoned by fruit-spraying. I thought so this year, but as we have been told that bees are probably not poisoned by spraying, I looked into the matter more closely.

Well, the previous day I overhauled a dozen colonies. It was the close of the fruit-bloom, and the wet, cold ground was white under the apple-trees. I selected such colonies as looked hungry, and the first five did not have one pound of honey, all put together, and *one* colony gave the flat buzz of starvation.

In feeding them I gave extracted honey, undiluted. Of the 5 colonies fed, only 2 were hungry enough to be sick. A few bees came out that night, but the next morning a great many were out, and this continued for nearly a week. No other colonies were sick. If it were *poison*, a few bees, at least, would be seen at other hives. These colonies were all strong, and full of brood, and this had taken all the honey.

In some of the published complaints, I see that this trouble followed the feed-

ing of starving bees. Perhaps the same would be true of other cases, if all the conditions were given. It might be a suitable subject for the Experiment Station to determine, how near starved bees must be, to become gorged; and also how thin the food should be to prevent the surfeit. Of course, if not sufficiently starved, no surfeit will occur.

But this year many colonies starved to death long after the pollen season opened, and the combs were supplied with pollen when there was nothing else.

Kalamazoo, Mich., July 6, 1892.

Honey and Bees in a Tree.

G. O. COUVILLON.

About two weeks ago I found a colony of wild bees in an old oak-tree, and noticing a great number of bees coming in and out of a hole in a large limb of the tree, in active duty, which generally indicates a good supply of honey, I concluded to fell the tree and see what treasure there was in it, and at the same time try to capture the bees.

Accordingly, next morning, with volunteer aid from several of my friends, eager to have a taste of the nectar, we soon had the giant tree down on the ground. With bee-veils and plenty of smoke, we soon had access to their sweet treasure, and, unmindful of a few stings from as many enraged bees, we succeeded in getting about 40 pounds of good comb honey, and enough brood-comb to fill five Langstroth frames.

The next morning, seeing the bees clustered in the cavity of the limb, I concluded, if possible, to hive them.

I brought two empty hives, each with a well-filled frame of honey, brood and eggs, which I took from other hives in my apiary, with all the other frames filled with comb foundation. With a soup-ladle I managed to scoop up the bees, and divide them as equally as possible in each hive. They are now working vigorously, and seem well pleased with their change of abode. I was successful enough to capture the queen (whose wing I clipped), and gave her to one colony, and furnished the other with one from a nucleus colony.

SQUIRREL AND SCREECH-OWL SKELETONS.

At the bottom of the cavity in the tree, and covered with dry leaves, decayed wood and moss, were the skeletons of a squirrel and a screech-owl, with egg-shells (doubtless from the screech-owl). I was puzzled to know how the unfortunate inmates found their way in, as the only entrances were two small holes, about one inch in diameter. Then how did they get in there? Presumably they used it as their winter quarters, and either the hole became too small for their exit, or they were suddenly besieged by the bees, and stung to death.

Carencro, La., June 29, 1892.

Italian vs. Black Bees, Etc.

CHARLES E. FALKNER.

I notice there are still a few that uphold the common black bee, as being superior to the Italians. I wonder if they ever had a good colony of pure Italians, and gave them the same chance they did their blacks. If the black bees were better honey gatherers than the Italians, why did the majority of the practical bee-keepers Italianize them in order to get rid of them? I say the majority, but should have said about all the bee-keepers.

Ten years ago it was not uncommon to go through the country and find two-thirds of the bees blacks, and now you would scarcely find any blacks at all. The only time that I can compare the blacks with the Italians, is in a year like the present one—when we have to feed them. I find that the blacks eat just as much syrup, and gather just as much honey as do the Italians *when* there is nothing for them to gather. All the difference I can see, then, is that you are liable to get the "big head" before you get through feeding blacks.

Pioneer, Ohio, July 4, 1892.

Up to July 4 the honey-flow was a total failure. The apple bloom furnished scarcely any honey at all, and white clover was but little better. The frequent rains washed the nectar out of almost all the bloom, and now the basswood is in bloom, but we can expect but little honey from it, as we are having another wet spell, and it looks as though it would continue for a few days longer. I had to feed my bees up to June 10, to keep them from starving; since that time they barely made a living. The bees are in a splendid condition, but that will all amount to nothing unless we soon have different weather. The farmers here are sowing an immense lot of buckwheat, and probably the bees will yet find help from some source, so they can store enough honey to keep them from starving the next winter.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
July 21.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec., Steel Creek, N. C.

July 27.—S. E. Minnesota and W. Wisconsin, at La Crescent, Minn.
John Turnbull, Sec., La Crescent, Minn.

Aug. 4.—Rock River, at Morrison, Ill.
J. M. Burtch, Sec., Morrison, Ill.

Aug. 17.—Wabash Valley, at Vincennes, Ind.
Frank Vawter, Sec., Vincennes, Ind.

Aug. 27.—Haldimand, at S. Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.

Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.
Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.
Benj. E. Rice, Sec., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich.

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees Should Get Lots of Honey.

The weather is hot, and bees should get lots of honey from such fields of clover as we have here.

T. F. BINGHAM.

Abronia, Mich., July 9, 1892.

Bringing in Honey.

Bees are now bringing in honey. Sunday, July 10, was the first good day for the bees this spring. They have had a hard time of it, and had to be fed to keep them alive. JOHN TURNBULL.

La Crescent, Minn., July 11, 1892.

Working on the White Clover.

In the spring of 1891, I had 60 colonies of bees, which I increased to 93, with lots of honey-dew from black walnut and oak, when the flow seemed to cease. I took off about 500 pounds, hoping to get late honey, but failed to get any at all; so when fall came I just left all the sections on the hives, as I was afraid they would not have enough to winter on, and it was not fit for anything else. I was not able to feed them sugar syrup, and thought I would try an experiment with them, so I put them under shelter with the surplus on them, with no packing, and left them to take their chances, and out of 93 I had 38 colonies left, and to date I have 58, all doing well on white clover, which is in abundance at this time. They are working in the sections nicely. I have taken off some honey, and I think next week I will be able to take off more in one-pound sections. My first swarm was on June 8. Those that have not swarmed are the ones that are gathering the most honey. If swarming could be prevented, I could get lots of honey.

S. BURTON.

Eureka, Ills., July 11, 1892.

Bees Improving the Time.

I think that the bees have got through starving in this locality, as we have had one week of weather that they could work most of the time, and they have improved the time. The loss of bees has been great in this county—it will average ⅓ or ⅔. Some have lost all, and those colonies left are very light in honey and bees. My loss in bees was 2 colonies out of 40.

A. E. BRADFORD.

Hammond, Wis., July 11, 1892.

Shipping Bees—Basswood Bloom.

What would be the best time to ship bees to the State of Washington—spring or fall? Would 50 or 60 colonies go all right by putting wire-cloth over the top and bottom of the hives; then lay an inch strip on the car bottom, parallel with the rail; then a 2-inch piece crosswise of the rail, then put on the hives, frames parallel with the rails; then another 1-inch on that row of hives, with a 2-inch piece crosswise again for the second row, and so on to the top of the car? As the car is 8 feet wide, and about 6 feet deep, I could put about 30 in a tier, across one end of the car, that

would be only two tiers in one end of the car, and 3 inches of air between the bottom and top of each tier of hives. Would they be apt to buzz or hum much on the road? The agent tells me the trip will take about 11 days. How early in the spring, or late in the fall, would it do to ship them?

The season is very backward here on account of so much cold and rainy weather. Colonies are not as heavy as they were a month ago, unless they have been fed, but after the heaviest rain of the season (July 2, 6 inches on the level), it has cleared off, and we have had eight or nine days of fine weather for bees to work on the clover, and the farmers to work at haying. Basswood is just beginning to bloom, and if the weather continues fair, we may get some honey yet. SUBSCRIBER.

Lenawee Co., Mich., July 11, 1892.

[Bees may be shipped, if properly prepared for the journey, at almost any time of the year, but the spring, before the hives are filled with honey, is preferable. If the car is properly ventilated, and the combs in the hive run parallel with the rails on which the cars run, your plan, as detailed above, will do very well.—EDITORS.]

Bees Doing Nicely.

My bees are doing nicely. I wintered 11 colonies on the summer stands, and all came through in good condition.

ROBT. HARVEY.

Aurora, Ills., July 12, 1892.

Linden Promises a Good Yield.

My loss of bees the past spring and winter was 80 colonies, mostly from being confined on honey-dew in the cellar. I interviewed Mrs. L. Harrison in regard to wintering bees on honey-dew. She told me not to "put all my eggs in one basket," but put some bees in the cellar, and the balance on the summer stands. Now I wish I had left all of them out-of-doors, for I left only 30 colonies out, and 28 wintered all right. I had about 40 colonies of black bees, and not one of them lived to see the clover bloom. One consolation I have is, that the loss weeded out all the inferior, and left the best.

The clover honey is coming in very fast now in the afternoon. The nights are too cool to secrete honey in the forenoon. The linden is just blooming, and the trees are full, and promises a good yield of nectar, if the weather keeps damp and moist. A hard rain does not wash the honey out of the bloom like it does on clover, for the bloom hangs down like a bell, and the water runs off. The prospect for a fall crop of honey is good, as the heart's-ease is coming in the corn in abundance, and in the creek bottoms and all lowlands. All the bees in this vicinity are dead, with few exceptions; but I heard of a great many swarms going to the forest. They must have come a good distance. I looked on the sand-bars along the creek about the time the new swarms began watering, and I think I caught a "line" on them.

GEO. POINDEXTER.

Kenney, Ills., July 8, 1892.

"Off" Year for Basswood Bloom.

I am now here in charge of my bees. The honey crop this year, up this way, from basswood will be a very light one, as this seems to be the "off" year for basswood bloom.

M. M. BALDRIDGE.

Richland Centre, Wis., July 12, 1892.

Good Fall Crop Expected.

I have had no swarms this spring, though I have not lost any of my old colonies, which number 10, but I have had to feed some through April and May. This has been the worst spring for bees that I ever saw. It has either rained, or the wind has blown so hard that the bees could not gather any stores all spring, though they are quite busy now, and the colonies are large and strong. I think we will get a good crop of fall honey, and perhaps a few swarms this month.

MRS. R. A. OLIN.

Fall River, Kans., July 10, 1892.

An Honest Pound Section.

We depend upon the consumers of honey for the sale of our product. A seven-to-the-foot section averages 14 ounces. I have enquired of several grocers, how much they ask for their honey, and the answer came at once, so much a pound, handing out a 14-ounce section. I asked them if that was a pound, and three out of four answered "Yes." When requested to weigh it, they would say, "Some of them run over, others under a pound." The truth

is, many of the honey consumers are not receiving what they pay for. The remedy is, stamp the weight on each section, or give an honest pound! I think the "Novice wide frame" has the credit, or blame, for the 4¼x4¼ section.

Honey is not ripened quickly in thick combs. The size of section ought to be such that there should be no waste space in the supers, and not discard the supers on hand. A section 6x4¼x1⅛ inches holds one pound, using separators. It fits the Langstroth supers with only ⅛ inch at the end to wedge, and fits the 8-frame supers lengthwise or crosswise. It is too late to change this season, but not too late to get at our best interests. C. E. MEAD.

Chicago, Ills., July 4, 1892.

No Honey and No Swarms.

The honey crop in this section is a complete failure so far. There has been no honey and no swarms. The basswood and sourwood is just commencing to bloom, but no prospect of any honey from that source that I can see: This ends our honey season until the fall flow.

T. K. MASSIE.

Concord Church, W.Va., July 9,1892.

Putting on the Sections.

I have 16 colonies of bees all doing well except one, and that has been dying. The young bees hatch out and crawl out at the entrance and die; sometimes there would be a double handful in one night. They had sealed honey; the queen is all right, and has a nice lot of brood. The bees look all right.

We have had two weeks of find weather, and the bees have been storing from white clover and Alsike. We are putting on sections now. The swarming season is about over here.

The BEE JOURNAL is a welcome visitor at our house. I could not do without it, for the small sum of one dollar a year. JOHN OTLY.

Haynie, Wash., July 2, 1892.

A Woman's Good Report.

I notice on page 53 that Mr. N. W. Shultz thinks that 61 pounds per colony is a big yield, and intimates that the hive used had much to do with it. My hives are of the Bay State pattern, which has closed-end frames. Last season my one colony gave me 2 swarms, and I got 40 one-pound sections of honey. This spring found one colony queenless. I have used it and one colony with a queen for increase by division. The one with a queen stored 20 one-pound sections full of snow-white honey before I had queens ready for my nucleus colonies. My third colony has not swarmed this season, and I have taken off 32 one-pound sections full, and there are 48 more nearly ready to come off the hive. I expect they will fill a few sections more this fall. My bees are Carniolans, and I am only a beginner in apiculture, and have made lots of mistakes. The BEE JOURNAL is a welcome visitor. MRS. O. G. HOWE.

Tilton, N. H., July 11, 1892.

Excellent Yield Expected.

Bees have done splendidly since July 4. White clover is abundant, and should the weather not get too hot, we will have an excellent yield of honey this season. My bees wintered well—I did not lose a colony. They are all in good working condition now, but have not swarmed much this season.

C. ZOLL.

Vermont, Ills., July 13, 1892.

White Clover in Abundance.

The spring here in northern Iowa was very late. I took my bees out on April 10, and there was not an average of more than one day a week that bees could get out in several weeks—either cold, windy, or rainy; but the many heavy showers and long rains have brought on the clover in great abundance, that had been set back by drouths in the five former years, and I hear that Mr. Bird, our pioneer bee-keeper that has had a large apiary for 20 years here at Bradford, says that he never knew such a clover harvest as we are having now; so I think such men who never rob their bees of winter stores, and have good ventilated cellars or chaff hives, must have a good crop, as basswood is yet to follow.

MRS. F. A. DAYTON.

Bradford, Iowa, July 11, 1892.

The Globe Bee-Veil, which we offer on the third page of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, with $3.00.

COMBED AND EXTRACTED.

Inoculation Against Bee-Poison.

Fifteen years ago, when an English gentleman began the culture of bees, he suffered severely from stings, but they have now lost their force. For several years past they have caused only a slight and rather pleasurable sensation, and that lasts only for a few minutes. But this thorough inoculation against bee-poison leaves him as susceptible as ever to the sting of a wasp.—*Northwestern Agriculturist.*

Don't Disturb the Bees.

With new honey and pollen coming in at a rapid rate, one is inclined to want to see what is going on inside the hive, and while a few examinations each week may not injure the bees, it is a better plan to give them time without too much interruption. The brood is easily chilled, and the hives cool off very quickly while standing open. With the bees confined to what frames they can cover nicely, and with plenty of stores in close proximity to the brood-nest, but little is to be done except to wait until they grow stronger.—*Indiana Farmer.*

Why Bees Work at Night.

Bees work at night in the hive and build comb as perfectly as if an electric light shone there all the time. It has often been asked why they prefer to work in the dark.

Every one knows that honey is a liquid without any solid sugar in it. After standing, it gradually assumes a crystalline appearance, or granulates, and ultimately becomes a solid mass. It has been stated that this change is due to the same agent which alters the molecular arrangements of the iodine of silver on the excited collodian plates and determines the formation of camphor and iodine crystals in bottles.

Honey has been experimentally enclosed in well-corked flasks, some of which were kept in perfect darkness while the others were exposed to the light. The result was that the portion exposed to the light soon became crystallized, while that kept in the dark remained unchanged.

Hence, we see why the bees are so careful to obscure the glass windows which are placed in their hives. The existence of the young depends on the liquidity of the saccharine food presented to them, and if light were allowed access to this, it would, in all probability, prove fatal to the inmates of the hive.—*Pearson's Weekly.*

Poultry and Bees.

I am a farmer on a small scale, but make a living all the same. I do not plant cotton nor sugar-cane, nor corn nor oats, nor wheat, but I always have a crop, rain or shine. Last year I raised 600 bushels of potatoes, 200 dozen cabbage heads, 400 dozen eggs, 600 spring chicks, and nearly 3,000 pounds of honey. My principal crop this year will be poultry and honey. I sold 22 colonies of bees, for which I received $66, and 2,440 pounds of honey for which I have realized 8 cents per pound, or $195. Up to July 1, I had sold 360 young fryers at an average of 15 cents each, and 364 dozen eggs at 10 cents per dozen. I have done all this, and tended to a pasture of 250 acres.—*Farmer's World.*

Common Sense in Fruit-Raising.

Common sense is a great requisite in the making of a profitable orchard. Do not expect a healthy, thrifty growth of young trees from land which you have been continuously cropping in grain and grass for years, and from which you continue to take off exhausting crops after the trees are planted. The trees must have something to feed on if they are to grow, and if the land does not supply their need, you must furnish fertilizers. Another important point about starting the trees is in regard to the pruning at time of planting. The roots should be cut back one-half, and the top pruned in due proportion. The branches of a tree as it comes from the nursery are often not where they are wanted. If opposite each other there is danger that the tree will split as it grows older. It is a good practice to take off the top entirely, leaving only buds on the main trunk, and these can be allowed to develop into branches where wanted. All that are not wanted should be removed with the thumb and finger before becoming large enough to require the knife.—*American Farmer.*

AMERICAN BEE JOURNAL

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25Atf Rochester, Lorain Co., Ohio.

HONEY AND BEESWAX MARKET.

CHICAGO, July 16. — Comb honey is dull and no demand. Selling finest grade white at 15c. With new crop prices will rule firmer. Extracted is scarce and in good demand at 7@7½c. Beeswax, selling at 26c.
S. T. FISH & CO., 189 S. Water St.

NEW YORK, July 16.—No comb honey selling. Extracted, new Southern, choice, 65 to 70 cts. per gallon.; common, 60 cts. per gallon. Beeswax—26@28c., according to quality.
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., July 16.—The old crop of comb honey is all cleaned up. First shipment of new comb honey this week, which we quote at 16c. for No. 1-lbs.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, July 16.— Demand is good for extracted at 5@8c. Stock on hand small. Demand slow for comb honey, at 12@16c. for best white.
Beeswax is in fair demand, at 23@25c. for good to choice yellow.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, July 16.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6@7c.; buckwheat, 5@5½c.; Southern, 65@75c per gal.; Calif., 6½@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c more per lb. for extra select.
CHAS. ISRAEL & BROS., 110 Hudson St.

ALBANY, N. Y., July 16— Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.
H. R. WRIGHT, 326-328 Broadway.

DETROIT, July 16.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.
M. H. HUNT, Bell Branch, Mich.

CHICAGO, July 16—Very little choice comb on market; demand equals supply; sells at 13@15c.; dark, 10@12c. Extracted, very scarce; good demand; white sells at 7@8c., dark, 6@7c Beeswax is plentiful, fair demand, 25@26c.
J. A. LAMON, 44-46 S. Water St.

MILWAUKEE, July 16—Demand very moderate, supply average of all grades but common quality. Best 1-lbs. 15@16c; common, 12@13c. Extracted, white, in barrels, 7c.; in kegs, 7½c; in pails, 7½@8c. Beeswax—demand fair, supply small. Price, 23@28c.
A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO, July 16—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax—24@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street.

NEW YORK, July 16.—Demand is light, and supply large, except buckwheat comb. We quote: Fancy white comb, 12@14c; buckwheat, 9@11c. Extracted—Clover and basswood in good demand at 6½@7c; buckwheat in demand at 5@6c. Beeswax in fair demand at 26@28c.
F. I. SAGE & SON, 183 Reade St.

CHICAGO, July 16.—Selling slowly, trade being in strawberries and other small fruit. No fine comb honey on the market—it would bring 15@16c. Extracted, 6, 7 and 8c., according to quality and kind. Beeswax, 27c.
R. A. BURNETT, 161 S. Water St.

BOSTON, July 16—Demand is light. White 1-lbs., 13@15c. No 2-lbs. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.
BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS, Minn., July 16 —Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.
STEWART & ELLIOTT.

KANSAS CITY, Mo., July 16.—Old honey is cleaned up, both extracted and comb. New crop will be in about July 10, here.
HAMBLIN & BEARSS, 514 Walnut St.

NEW YORK, July 16.— Demand moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 120 Pearl St.

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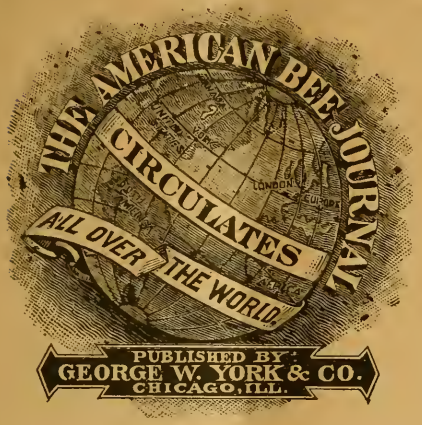

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THOMAS G. NEWMAN, GEORGE W. YORK, } EDITORS.

Vol. XXX. July 28, 1892. No. 5.

EDITORIAL BUZZINGS.

"**The Man** who could, if he would, but won't
Bestow on his wife a dime,
Is the man who would, if he could, but can't
Get married a second time."

Pure Beeswax and clean, unsalted butter make an excellent substitute for "creams" and balms.

For Chapped Hands or any sort of roughness, sage-tea, or oat-meal gruel, sweetened with honey, is said to be good.

Honey-Day of the Colorado State Bee-Keepers' Association will be held in Longmont, Colo., on Sept. 28, 1892. There should be a good attendance of the membership of the Association, as a very enjoyable time is sure to be had by all who can arrange to be there.

All Bee-Keepers who read this will help to make more complete the interesting result of an excellent effort now being made by Bro. A. I. Root, of Medina, Ohio, if they will comply with the following request made in the last issue of *Gleanings:*

We shall be very much obliged if bee-keepers all over the country, just as soon as they read this, will send us a postal card, answering, by number, in not more than four or five words, these two questions:

1. How has the honey season been with you this year?

2. What is your average per colony up to date?

We are well aware that this will be too early for many localities, on account of the lateness of the season; but we want just such information as you are able to give at the time of signing the postal card. What we desire to do is to report the condition of the honey season, so far as possible, throughout the country.

We urge every subscriber of the AMERICAN BEE JOURNAL to *at once* write the postal card to Mr. Root, so that the forthcoming report may show as fully as possible the general honey season this year, and the average pounds of honey taken per colony. It will be an exceedingly nice thing to know, though it means a good deal of work for Bro. Root, to get the thousands of responses in shape for publication.

Bro. W. Z. Hutchinson, Flint, Mich., says this, in the July number of his *Bee-Keepers' Review*, about the white clover honey harvest in his locality:

An old-fashioned white clover honey harvest is what this locality is now being blessed with for the first time in five years.

Good! That is about what quite a number are writing to this office now, from a number of different localities throughout the country. Many are growing enthusiastic over the prospect, and expect to secure a bountiful yield of honey this year.

The North American. — On page 141 of this number of the BEE JOURNAL, Mr. Frank Benton has an interesting article on the time of the next meeting of the North American Bee-Keepers' Association, which is commended to all our readers. While all of Mr. Benton's points are very well taken, yet it seems to us that what Bro. Hutchinson suggests in regard to the time of holding the convention will meet with the approval of very nearly all who can attend the convention. Mr. H. says this in the *Bee-Keepers' Review :*

The North American might meet in Washington the next week after the National G. A. R. Encampment, which would be about Sept. 27 for the bee-keepers to meet. This date is suggested by Frank Wilcox, of Mauston, Wis. If this date will allow us to take advantage of the reduced rates resulting from the G. A. R. meeting, then that is the time to hold the meeting.

We would suggest that as Bro. Hutchinson is the Secretary of the "North American," he is just the one to correspond with the G. A. R. transportation committee, and ascertain definitely how long a time *after* the date of the reunion, and how long *before*, the tickets will cover. It may be that the convention of bee-keepers could meet before the date of the G. A. R. reunion, in case the tickets did not extend far enough beyond that date to give sufficient time for holding the convention afterward.

At any rate, if the North American Convention is to be held in September, it is high time that it be known, so that all intending to be present may have ample opportunity to prepare to enjoy the mellifluous event.

Bro. Hutchinson, as usual, will do all in his power to make the coming convention a memorable one. Meeting, as it will, at the Nation's Capital, it should be such a gathering as will command the attention and respect of the whole country.

Here is what Bro. Hutchinson says further, in speaking of the programme, and those who expect to be present at meeting in Washington :

I am already planning a programme, and shall be very glad of suggestions. I wish every reader would send me a list of the topics he would like discussed, and of the men that he would like to have lead in the discussions. I shall work hard to make the coming meeting one of the best that the society has held.

One thing more, let each who expects to attend write to me and let me know, that a list of all such may be published. Nothing increases the attendance like knowing in advance that "So-and-So" will be there.

Now, let every one interested comply at once with the requests made by Secretary W. Z. Hutchinson, addressing him at Flint, Mich., so that he may be enabled to carry out the splendid plans already so auspiciously begun.

Some Bee-Keepers are having grand yields of honey now. On July 17 Mr. A. J. C. Patterson, of Dicks, Mo., wrote thus concerning the bee-season in his locality :

My bees are doing well. It is a glorious year with us. I have obtained more honey than I ever did before.

Mr. Jas. F. Partlow, of Iowa Falls, Iowa, on July 20, when renewing his subscription to the BEE JOURNAL, said :

Bees are booming. White clover and basswood were never as good as now.

Apparently the "silver lining" of the multitudinous clouds of the past few months is beginning to reveal itself. Bee-keepers all over the land will welcome the "lining" side of the "gloomy clouds" for some time to come—they have had quite enough of the dark side for the present. Let all take heart, and also take advantage of the opportunity to catch the "honey-shower."

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1:00. It is a splendid Dictionary—and just right for a pocket

BIOGRAPHICAL.

MRS. JENNIE ATCHLEY.

Mrs. Jennie Atchley, of Floyd, Texas, the subject of this sketch, is of German-English descent, and was born at Decatur, Meigs County, Tenn., on July 14, 1857, making her now 35 years old.

Her first bee-keeping began when 12 years of age. When 17 years old, she

MRS. JENNIE ATCHLEY.

married Mr. Emerson J. Atchley. In 1877, in order to be up with the times, she secured all the bee-literature obtainable, and at once began queen-rearing as a specialty, and shipped her first queens and bees by the pound in 1879 and 1880, and her queen-trade gradually increased until 400 nuclei could not keep her supplied with queens to fill orders.

Her preference has always been for the Langstroth frame, and at present she uses the eight-frame Simplicity hive. Mrs. Atchley, like many others, has had her sweet and bitter in apiculture, especially in queen-rearing.

She has always had a great desire for flowers, chickens, pigs and bees, preferring to do as much of the work as possible herself, and she finds both pleasure and health in the open air and out-door work, and now does all the labor of queen-rearing and hive-making, and everything that is done in the apiary, with her three children to help her, viz.: Amanda, aged 17; Willie, aged 15; and Charlie, 13 years of age. These children have been brought up in the apiary, and scarcely know any other work.

During the present season, Mrs. Atchley will ship more than 2,000 queens, besides full colonies, several hundred pounds of bees, nuclei, etc. She owes her present enviable position in apiculture, to Mr. A. I. Root, of Medina, Ohio, who has by kind words and encouragement, by private correspondence, and through the medium of *Gleanings*, helped her over many sad trials and difficulties of the past 15 years.

Her family now consists of Mr. Atchley and seven children. Mr. A. has been a bee-keeper for 25 years, but his specialty was honey production until lately, when they have all been compelled to assist in the queen-rearing.

Mrs. Atchley is well-known to the readers of the BEE JOURNAL, through her various articles, and answers to queries from week to week. Many admiring friends will be delighted to be permitted to look into her pleasant countenance, which graces this page. It affords us much satisfaction to have this opportunity to present to our readers one among the few prominent apiarian women of America.

Ernest Root, in a recent issue of *Gleanings*, stated that in a solar wax extractor the use of double glass causes at least 10 per cent. more heat than single glass.

Reports of the Season are daily growing better, from nearly all over the country, and bee-keepers (as well as the bees themselves) are taking new hope, and feel that the worst is now past for this year. The basswood seems to be yielding very heavy, and clover is unexpectedly proving its old-time claim to being an excellent yielder of nectar. *Gleanings*, for July 15, speaks thus editorially of the season at Medina, Ohio, and particularly of the basswood honey-flow:

The flow from basswood has been exceptionally heavy. We never saw the bees working so strong as they have been during the last week. On or about the first of July our colonies were on the verge of starvation. At this date, July 12, all the hives are crammed full of honey, and even nuclei have filled their combs. This large supply of nectar seems to come entirely from young basswood trees, because the old ones have been cut down for sections.

Later.—It transpires that some of this honey, at least, is from white clover, which, this year, we thought would amount to nothing.

The So-Called Punic Bees.—Mr. Thos. Wm. Cowan, one of the editors of the *British Bee Journal*, has returned from his trip to Northern Africa, whither he went to trace the origin of the so-called Punic bees. In the issues of his paper for June 23 and 30, 1892, he writes thus of the results of his investigations, from which we make the following extracts:

Now that we have returned from our travels in Tunis and Algeria, no doubt our friends will like to know something about the bees of these countries, of the different apiaries we have visited, and of our experiences with bees in Africa, pleasant and otherwise.

The journey was undertaken in the interests of bee-keeping, and for the purpose of removing, if possible, some uncertainties that existed with regard to the bees of North Africa. Our original plan has been, with few variations, carried out; and after visiting Tunis, Algeria, and taking Switzerland on our way, we have returned home greatly benefited by the change. During our travels we visited 32 apiaries, and gathered very much information.

Whether or no there were two races of bees in North Africa was the object of our visit, and we also wanted to see for ourselves if the gentleman who had supplied them had two races in his neighborhood, and if the stories about the difficulty of getting these bees were true.

On our arrival in Tunis, before going to visit an old correspondent of the *British Bee Journal*, who is a large proprietor, cultivating 9,000 acres of land, as well as being a bee-keeper, we engaged a guide and interpreter, and through him made our investigations. Our readers, we hope, will not be surprised to hear that we were on the very spot from whence Tunisian bees had been sent to England, and the proprietor was not a little astonished to hear that his bees had been called *Punics* by the importer. We very soon found out all about them, and instead of there being such a difficulty in getting them, there was none at all.

Now, as regards those bees that were sent over to England: The closest investigation showed that they were just the ordinary Tunisian bees, identical with those of Algeria and Morocco. The most careful inquiries were made, but no other bees were found. We need hardly say that no such race as "Punic" was found, and no one that we came across knew of any other race of bees but the ordinary ones. The Regency of Tunis is not large, and there was no more difficulty in getting information about persons there than there is in Sheffield. We visited Carthage, and saw all that there was to be seen, but found none of the so-called Punic bees there.

Mrs. Jennie Atchley has sent us a sample of her very yellow bees, which are indeed exceedingly active, bright and beautiful. It is surprising what pleasing results may be obtained in the way of color and business in bees by careful selection in breeding.

Honey-Candy is made as follows: "Take one pint of sugar, with water enough to dissolve it, and four tablespoonfuls of honey. Boil until it becomes brittle on being dropped into cold water. Pour off into buttered pans.

QUERIES AND REPLIES.

Unfertilized Queens and Drone-Eggs.

Query 829.—If the eggs of unfertilized queens produce drones, from what source do those eggs derive their vitality?—Tennessee.

I do not know.—E. FRANCE.

From the queen.—M. MAHIN.

From the mother.—C. C. MILLER.

From the Creator.—EUGENE SECOR.

From their "ma."—JAMES HEDDON.

From the queen.—MRS. L. HARRISON.

I give it up. Ask something easy.—C. H. DIBBERN.

From the queen, the same as all eggs do.—A. B. MASON.

I am not posted, but I should say the queen.—G. M. DOOLITTLE.

I will leave this for Prof. Cook to answer.—MRS. J. N. HEATER.

From the queen, of course. From what other source could they?—R. L. TAYLOR.

According to the Dzierzonian theory of parthenogenesis, from the queen. There is still room here for scientific investigation.—J. P. H. BROWN.

This takes the "wind all out of my sails." When you determine in what way the life-germ is retained in the egg after being parted from its mother, you will be on your road to an intelligent solution.—J. M. HAMBAUGH.

From the ovaries of the queen. We now know that eggs from many insects are fertile without fecundation. The eggs of bees are so, and in developing when unfecundated always produce drone or male bees.—A. J. COOK.

There is no "if" about it, for it is a fact. It is a law of nature, which has been called "parthenogenesis" by the scientists, and it must be that the vitality comes from the mother. It is queer, but *it is so*.—DADANT & SON.

It appears to be a law througout Nature in reproduction, that the inherent vital principles of the female are prepotent in developing male offspring, while the male possesses prepotent power in producing female offspring. In the union of the vital principles of the male and female, the state of development of the ovum at the time the union occurs has more to do with the development of sex than any other factor—the male principle being prepotent only when the ovum first matures. At a late stage of its maturity the progress towards the development of a male has so far advanced that the union with the male elements has no longer power to determine sex, but simply to vivify. Thus proving that in mammals the ovum comes very near the point of generation without the male elements, as there is at least progress in the evolution of a male, while in certain insects the unfertilized ovum invariably develops a male.—G. L. TINKER.

Read up the subject of "parthenogenesis," and all will be explained. The little book of "Dzierzon," explains the matter, as regards honey-bees; but the works of an entomologist will do the same, and also in regard to other insects that breed in the same manner. Parthenogenesis, as it relates to wasps, is as peculiar as to the "apis mellifica."—J. E. POND.

I think it would take a full column of the BEE JOURNAL for me to explain myself on this question. But the eggs seem to derive their vitality from the queen alone, this being one of Nature's freaks. It is said by some of our grandparents in bee-culture, that the drone of a pure Italian queen is not touched by the mating of the queen to a black drone, but if it were not ill manners for a child to dispute grandpa, I would say differently.—MRS. JENNIE ATCHLEY.

There is no "if" about it. The word "unfertilized" or "unfertile," when applied to the queen honey-bee, means that she has not met the male. This is the sense in which these words are used in all bee-literature, if the writer understands himself. *Virgin* queen honey-bees possess the singular function—or vitality, if you please—that enables them to produce male progeny; that is all we know about it. I could give you some nice "theory," but the *facts* as to the source of "vitality" are beyond my grasp.—G. W. DEMAREE.

The Dzierzon theory of parthenogenesis explains the fact so thoroughly that there remains no question about it—no place for an "if." The eggs of unfertilized queens will produce drones, and drones only. The source of vitality is the queen, Nature or God.—EDITORS.

COMBED AND EXTRACTED.

Blue-Jays and Bee-Martins.

The California blue-jay frequently helps himself to a breakfast in the apiary, no doubt first attracted to the spot by the imperfect or dead brood thrown out of the hive by the bees; but in time the jay discovers that worker-bees are palatable morsels, and after the first taste of honey from that source it will perch on top of the hives and destroy large numbers of worker-bees. It would be doing the fruit-grower and bee-keeper both a service if the blue-jay was driven out of California. When peaches and apicots are ripening, the jay swoops down on the fruit, driving his beak into the finest specimens, and gashing them so that linnets, hornets, wasps and bees have an opportunity to destroy what the jay has left of the injured fruit.

There is another bird still worse than the blue-jay. The bee-martin breeds and multiplies in southern California, so that in and about an apiary where there are trees, they become a great nuisance, and destroy large quantities of worker-bees. They have a habit of getting in the hive of bees as they come home from the pasturage. The martin, on the wing, with its mouth wide open, hovers in the air taking every bee it can reach; one bird will destroy hundreds of bees in a day.—C. N. WILSON, in the *Rural Californian*.

Occupations of Insects, Birds, Etc.

The marmot, so naturalists say, is a civil engineer; he not only builds houses, but constructs aqueducts and drains to keep them dry. The white ants maintain a regular army of soldiers. The East India ants are horticulturists; they make mushrooms, upon which they feed their young. Wasps are paper manufacturers. Caterpillars are silk-spinners. The bird "ploceus textor" is a weaver; he weaves a web to make his nest. The prima is a tailor; he sews the leaves together to make his nest. The squirrel is a ferryman; with a chip or a piece of bark for a boat, and his tail for a sail, he crosses a stream. Dogs, wolves, jackals, and many others are hunters.

The black bear and heron are fishermen. The ants are regular day-laborers. The monkey is a rope dancer. The association of beavers presents us with a model of republicanism. The bees live under a monarchy. The Indian antelopes furnish an example of patriarchial government.

Bees are geometricans; their cells are so constructed as, with least quantity of material, to have the largest-sized spaces and the least possible loss of interstice. So also is the ant-lion; his funnel-shaped trap is exactly correct in its conformation, as if it had been made by the skillful artist of our species, with the aid of the best instruments. The mole is a meteorologist. The bird called the lime-killer is an arithmetician, so also, is the crow, the wild-turkey, and some other birds. The torpedo, the ray, and the electric eel, are electricians.

Temporary Loss of Prolificness.

Going through the apiary, a good many years ago, I noticed a colony that seemed to be decreasing, when it should have been increasing in population. On looking them over I found the brood-nest very small, occupying only a small part of three combs, perhaps four inches in diameter in the center one. There was one queen-cell completed, the old queen was there, and a very few eggs. All of the comb not containing brood was filled with honey. The queen was young, and had been a good one, so I knew the colony should not be in any such condition. I destroyed the queen-cell, extracted the honey from all the combs, and closed the hive. Four weeks later there was the usual amount of brood in it. From some unknown cause the queen had temporarily lost her prolificness, and later had regained it.

At another time I found a colony in a similar condition except that there was a young queen, apparently not fertile, instead of a cell. I took the extractor and gave the colony a dose of the same medicine. In due time there were two fertile and apparently prolific queens in it. They soon made the hive (containing 20 Quinby frames) very populous, and kept it so the remainder of the season. With Italian bees, two queens in a hive—an old one that has lost her fecundity, and her daughter—is quite common, as they seem to permit super-annuated queens to live until they die of old age. But two fertile queens in a hive is a very rare occurrence.—J. H. TOWNLEY, in *Farm, Stock and Home.*

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

When Shall the North American Meet?

FRANK BENTON.

It was my intention, at the Albany meeting of the North American Bee-Keepers' Association, to suggest Washington, D. C., as a very suitable place for holding the next convention. Illness, however, prevented my attendance, and so I refrained from trying to influence the choice. But some one else seems to have had the same idea regarding the selection, and as a result the National Capital has been chosen. I am greatly pleased at this, and bespeak for all who come, an interesting visit. To make it of value, from the bee-keeper's special stand-point, depends, of course, wholly upon the members of the Association. Whatever may lie in my own power that will contribute to the success of the meeting, I shall gladly do. And just at this juncture, I think it is in the interest of the society to have the other side of the question raised by Mrs. J. M. Null, on page 101 of the AMERICAN BEE JOURNAL for Jan. 22, 1892, presented for the consideration of the Executive Committee, and members of the Association generally. Mrs. Null says:

> "I see that the next meeting of the North American Bee-Keepers' Society is to be at Washington. Why not have it at the same time as the G. A. R. reunion? Then many ladies could attend in company with their husbands, and all would get the benefit of the very low rates given to the Grand Army of the Republic."

The editor of the AMERICAN BEE JOURNAL remarks:

> "That is an excellent suggestion about holding the National Convention at Washington, D. C., at the same time as the Grand Army reunion. We commend this to the consideration of the Executive Committee."

A consideration of the facts which follow, will, I think, convince most of those interested in the success of the meeting referred to, that such a plan would not be a wise one.

1. The reunion of the Grand Army of the Republic will be held in September—a time when, as is apparent to all, many bee-keepers cannot come because they will then be engaged in securing the fall harvest, or in preparations for it, or, in more northern sections, in preparing their bees for winter, while some queen-breeders will find their work cannot be left for a week or more at that time, and it must be borne in mind, too, that many bee-keepers are also engaged in farming, fruit-raising, poultry-raising, or similar occupations, which afford some leisure during winter, but which cannot be left for a convention in early autumn. Furthermore, many who could attend in winter may not have the ready means to spare in September, having had, in order to secure the season's harvest, to invest in supplies, and perhaps to pay help, without at that date having realized much if any return for the year.

2. Washington will then be filled to overflowing with visitors, and the excitement and distractions which will attend the military parades and displays will completely drown the "hum" of the peaceful, busy bee, and her handful of representatives as well. It is expected that fully 500,000 visitors will be in Washington during the reunion, thus twice the population of the city. It will, indeed, have to be a lively bee-convention to compete in interest with the brass bands of the big Grand Army of the Republic show. Most bee-keepers have attended conventions, and their interest in the success of another would have to be strong to cause them to give their undivided attention to it when imposing military parades, grand decorations, and fine music, such as will be here in September, 1892, are before the doors.

3. Hotels and boarding-houses will be crowded to their utmost, this, even notwithstanding the fact that Washington, for its size, is perhaps better supplied with such accommodations than any other city in the Union. Quarters for between 50,000 and 60,000 G. A. R. people have already been engaged, and long before September next, all available lodgings will be taken. During the reunion of the Grand Army of the Republic last year, in Detroit—a larger city than Washington—hotels and boarding-houses were all full, and prices were high. Mrs. Benton and myself wish we might entertain all bee-keepers who come, and have no other acquaintances or relatives with whom they prefer to stop, but———you see there's a great blank! The latch-string is out, but if all favored us, we'd have not only to "double-up" a good deal, but over in the middle of the beds you'd be "as thick as bees!"

4. The heat is very likely to be great here in September, and especially un-

bearable for those coming from the North, the atmosphere being moist and sultry. The folly of holding conventions here during the warmer months was shown at the meeting of the "American Association for the Advancement of Science," held here last summer, when the devotees of science had to pass through a regular holocaust in return for the privilege of holding converse with their fair Goddess.

"The American Pomological Society" met in September, and found the weather little better. On the other hand, the "Modern Language Association," the "National Geographic Society," the "National Florists' Association," and numerous other societies which have met here during the fall and winter, have found that, even at its worst, the weather was no hindrance to their proceedings, while much of the time during their sessions it was delightful.

As an off-set, it is urged that members of the North American Bee-Keepers' Association would secure the advantage of reduced railway rates. The fare to Albany last year was the full rate going and one-third of the full rate returning. No doubt the same privilege will be granted this year; and it is not expected that the Grand Army will secure a greater reduction in September, though should they, it will be not less than full fare going, and return free.

One might infer from Mrs. Null's remark about the attendance of ladies, that many Grand Army of the Republic men, themselves not interested in bee-keeping, have wives that are so. If this is true, let me point out, in passing, how fortunate these men are in comparison with their colleagues, whose wives scream "Murder," and take refuge in the cellar or garret when an innocent bee, scenting sweets, comes in an open window. Through very thankfulness these men should send their wives to the Bee-Keepers' Convention, even though they cannot come, or do not care to do so themselves. And, seriously, has not the wife as much right to spend their common earnings to attend such a convention as the husband has to use them to come to the Grand Army reunion?

Mrs. Null thinks the convention, if held at the same time as the reunion, would be considerably increased in numbers through the presence of this class. I am sure every one would be glad to see a large attendance of lady bee-keepers, and also of the wives and daughters of bee-keepers, whether with their own hands they assist or not in the work of the apiary, but I think most of my readers will fully agree with me that the Grand Army reunion will hardly prove an attraction which will bring this about. I believe, on the other hand, as already indicated in paragraph No. 2 of this communication, it would prove a *dis*-traction. It is plain, if it induced any bee-keeper to come to Washington who would not otherwise do so, that bee-keeper's interest and time would be divided between the two bodies. And it is natural to suppose that all attending the bee-convention would be more or less attracted by the Grand Army doings, so that it would surely be very hard to make a convention held here then a highly successful one.

In view of this, I suggest, therefore, the early part of the coming winter, say during the first half of December next, as a much more favorable time, and I trust that whoever has any further argument, in favor of or against the time here suggested, will be heard from at once through the bee-periodicals. If, in order to secure reduced railway rates it is necessary for the Association to meet when some other gathering takes place at the National Capital, it would be best that this should be a convention of some literary, religious, or scientific body, rather than a great national celebration, as the city would not then be overcrowded. I might, if it is desired, ascertain in regard to the dates for such meetings, and inform the Executive Committee in time to get due notice to all parts of the country.

Washington, D. C.

[For editorial remarks, see page 136 of this number.—EDS.]

Removing Surplus Honey and Tiering Up.

DR. C. C. MILLER.

Question—During the surplus season, would you once a week remove filled sections, or keep tiering up?

Answer—If, by removing filled sections, you mean picking out of the super while on the hive the finished sections, I certainly would not do that. As a general rule, perhaps always, except towards the end of the harvest, I never remove anything except a whole super at a time. In the busy part of the season all the sections in a super will be pretty evenly finished up together, and sometimes I leave the super on until

every section in the super is entirely finished.

Oftener, however, the four corner sections in the super will not be finished until sometime after the others. So I do not wait for them to be finished, but take off all supers that have only four to six unfinished sections, and when they are taken to the house I fill up a fresh super with these unfinished sections, and put them back for the bees to finish up.

Queston—In tiering up, do you place the empty super on top, *al a* Doolittle, or underneath, *a la* Root?

Answer—Both. If the prospect is very strong that they will surely finish up what they already have, and make a good start in another super, then I put the empty super underneath. But if it is somewhat doubtful, then I put the empty super on top. In the latter case, the bees will not be likely to enter the super unless they need the additional room, and if honey is not coming in very readily, the super beneath will be finished up sooner.

If I were obliged to adhere to one plan or the other throughout the entire season, I think I would put the empty super on top, for when bees are working well in one super, they are not very slow about entering one above it, providing the flow is good. But if toward the end of the season an empty super is put under, the bees are pretty sure to commence in it, even if they are not getting enough to finish up what they already had.

Question—Ordinarily how high do you tier up?

Answer—That depends. There are colonies and seasons when one super is more than enough. But in a good season a strong colony is likely to need room in two additional supers before it has had time to finish up the first. That would make three supers high. Judgment is needed in this matter, and, no matter how good your judgment, you must do some guessing, for sometimes the season stops short early, and sometimes it hangs on a month longer than you expected. I have had as many as five or six supers on at a time on strong colonies when honey is coming in with a rush (that was in good old times when there was such a thing as good crops), and the whole five or six were well occupied; and then I have taken off from such a colony five or six supers nearly all filled, but hardly a section finished. Better too few than too many.

Question—When putting on only 12 sections in the fall, what becomes of the space occupied by the other twelve?

Answer—The space is left vacant, only a little board, 12x4¼x¼, rests upon the T tins in place of the lacking row of sections. This little board, shutting off direct communication from below, seems sufficient to prevent the bees starting in the empty space, with rare exceptions.

WHY DO BEE-KEEPERS DISAGREE?

Question—Why do leading bee-keepers disagree so widely on so many important matters in bee-culture?

Answer—Look here. Aren't you getting just a bit inquisitive? Well, perhaps the three principal reasons are difference in location or circumstances, prejudice, or ignorance.

The man whose principal honey-flow is in the fall will differ in his management from the one whose harvest ends with white clover.

We are all tinctured with prejudice sufficiently to make us think a little better of plans we are familiar with, just because we are familiar with them.

And when you remember that modern bee-keeping is only fifty years old, you can readily believe that there is still ignorance on a great many points, and the guesses made on obscure points are not likely to agree. If I could find a man entirely informed on every point connected with bee-keeping, I could keep him busy one while answering questions about things I don't know.—*National Stockman.*

Marengo, Ills.

The Season in Minnesota, Etc.

C. THEILMANN.

After reading the report of Mr. Pond, of Kasson, Minn., on page 54, I want to give mine, to show the great difference in localities which are comparatively near each other.

Mr. Pond writes that white clover never showed up any better than it does now. Here we have but little white clover this year, and what little there is, yields but little honey. With apparently the most favorable weather for the past week, there is absolutely no honey in any flowers worth mentioning.

It is almost discouraging for the bees and their keepers, to see the hives full of bees hanging and lying around idle, day after day and week after week,

without even getting enough for their living right in the middle of the white clover season, and have to be fed honey to keep them from starving to death, which I had to do the past three weeks. The outside combs in the brood-chamber are as dry as paper, and after feeding nearly 1,500 pounds of sugar up to date, hardly a sign of it can be seen in the hives.

Some three weeks ago several swarms came out, but since then there has not been any, and for the past week most of them have killed off their drones. A great many colonies have eaten most of their younger brood in an out-apiary, to which I had not been in a week's time, which had considerable more white clover there than at home, upon which I depended in vain.

When I put my 320 colonies of bees out on April 9, only one colony was dead; on the whole, they were in good condition, and had plenty of stores with what they got outside until about three weeks ago, although we had very cold and wet weather.

On June 15, we had the heaviest rain and most lightning in 36 years, which was followed with two more very heavy rain-storms within the same week. The floods were higher, and did more damage in this vicinity since the country was settled. Nearly all the fences and bridges were swept away, and many nice fields totally destroyed. Some of my neighbors' bees were drowned, and I had to move some of mine to keep them out of the water. All the crops in the valleys and ravines are badly damaged, and many totally destroyed; $1,500 will hardly cover my loss alone.

Small crops on the upland look prosperous, after a week of the finest weather any one could wish. Corn is at least three weeks late, and has hardly time to get ripe, even with the most favorable weather from now on.

CAUSE OF NON-SECRETION OF NECTAR.

Now, why is there hardly any honey in any of the flowers since these heavy rains, accompanied with continuous lightning? I have heretofore given my reason and theory in the BEE JOURNAL, which was contradicted by some of the correspondents, while others agreed with me, viz.: I claim that the discharge of so much and heavy electricity, accompanied with heavy rain-falls, will destroy the honey-secreting properties which are in the atmosphere; and furthermore, is damaging and sickening to most of the vegetable kingdom. Since this heavy discharge, most of the plants and trees—yes, and corn—have looked feeble and blighted. Some of the leaves look as if they were burned by fire, and many are falling from the trees. Before the storms, everything looked a dark, rich color, and was rank in growth.

There was a good prospect of linden bloom, but since then the buds look feeble, and many are falling off now. It will be about a week before they will be in bloom, and what they will do for the bees, the future only will tell. We hope for the best. Some years ago it appeared to me that these uncommonly heavy storms affected the honey secretion, but more particularly so the past four years.

Theilmanton, Minn., July 11, 1892.

Various Bee-Smokers Compared, Etc.

ERNEST R. ROOT.

I have experimented much with smokers, and have been quite closely connected with the manufacture, so far as it relates to details of construction, of some hundred thousand. I have experimented with nearly all the smokers ever advertised, from the original bellows smoker, first advertised by Father Quinby, to the perfect smokers of to-day. I suppose I ought to know something about smokers. But may be, before I get through, you will conclude that I do not.

Naturally enough, I ought to recommend and praise up, above all of its competitors, the smoker in which I am particularly interested; but my opinion can hardly be biased if I give the palm to the "other fellow's" smoker—the Bingham—in the manufacture of which we are in no way interested. I am sure I would very much rather give the preference to our own—the Clark—but I am afraid if I did so, our boys in the apiary would ask me why I pick out the Bingham when I propose to "tackle" a colony of cross or uncertain temperament, or why it is that it is generally used by them in the apiary.

Yes, the Bingham is used more largely in our apiaries than the Clark. It is strong and well made, gives a good volume of smoke, of the subduing kind, and is always prompt for emergencies. It burns any kind of fuel, although our boys very much prefer the excelsior sawdust, such as comes from the hand-holes in making hive-bodies.

The Bingham has one distinctive feature, that, in my mind, makes it superior to all other smokers; and that is, the absence of any connecting tubes between the bellows and fire-box, or stove. Just so sure as the tube connects the two, as in some of the hot-blast smokers, it has a tendency to become clogged with creosote, and to carry smoke into the bellows; with the result that the bellows valve becomes stuck up and wheezy.

We have a bellows that has been in use, in connection with the Bingham fire-box, for the last three or four years; and the leather valve is just as clean, apparently, as the day we began using it. I may be mistaken, but I think you will not find a like condition in all other smoker bellows that have been in use for the same length of time; therefore, in hot-blast smokers I would object to the use of any connecting-tube between the two parts of the implement. The very absence of a tube in the Bingham prevents smoke from entering the bellows, and causes it to last and do good service. The only disadvantage is, that the blast is considerably weakened; although for general manipulations of the hive it is strong enough.

But there are some advantages which the cold-blast smokers (particularly the Clark) have over the Bingham, or any of the hot-blast smokers with which I am acquainted. Aside from the fact that the blast is cold, it has very much more force. With an ordinary Clark, a stream of smoke may be forced through four or five hive-bodies, or eight or ten supers, for the purpose of driving the bees out of the same. Again, with our cold-blast Clark, or the Hill—a very excellent cold-blast smoker by the way—you can start the fire very readily—much more so than in the hot-blast; and in replenishing they do not require the handling of a hot cone, although Mr. Bingham has made an improvement in his smoker by the use of a spiral-spring handle, by which the cone may be removed without burning the fingers. This safety device (while I first liked it) I do not think is strong enough to endure the twisting and pulling often required to remove the cone top.

The Clark also, when well going, yields a smoke for pungency nearly equal to the hot-blast, and it sells at a price considerably lower. For ordinary manipulations in the apiary it answers very nicely. In the last year or so it has been improved considerably, by the use of perforations in the fire-box, not only to increase the draft, but to prevent fire dropping, something that used to annoy when the door was revolved enough to allow a sufficient draft. The new blast-tube is so large it rarely clogs up so as to make much trouble, although it requires to be cleaned occasionally; and the valve, in the bellows, becomes in time a little wheezy from creosote, although it may be cleaned with a little care.

FUEL FOR BEE-SMOKERS.

For fuel we have tried rotten wood, hard wood, pine sticks, sawdust, shavings, excelsior, paper, rags, peat, corncobs, and a peculiar kind of sawdust that comes from making hand-holes with a wobbling saw in bee-hives. The last-named we find to be far superior to all the others. It lights quickly, and smolders enough to give quite a dense blue smoke. It is readily obtainable of the supply manufacturers. It should be remarked, however, that the fine sawdust should be carefully sifted out. —*Bee-Keepers' Review.*

Medina, Ohio.

The Mating of Queen-Bees.

GEO. S. WHEELER.

Mr. A. C. Aten's version (page 18) of the mating of the queens in my apiary, is not the correct one, as I had, at the time mentioned, only one small colony of Italians with few drones, and some 20 colonies of black bees with thousands of drones, and not another colony of Italian bees within ten miles, yet nearly every queen reared from the Italian colony produced three-banded bees. The next season, having introduced these queens producing bees that were three-banded to nearly all my colonies, I expected my queens to be purely mated, and of course should have fine three-banded Italians; but such was not the case, as nearly every queen reared the second year produced plenty of black bees. I have no doubt that my queens, the first season, mated with black drones, as the chances would be very small for them to meet Italian drones, when there was only one small colony of Italians with few drones, and 20 colonies of black bees with an abundance of black drones in my own yard, and my neighbors' bees were all black.

I feel quite certain that very many times from a pure, very light colored Italian queen, one can rear queens that

will about all produce bees that would show three bands, and pass for pure stock, if they have only black drones to mate with.

New Ipswich, N. H., July 16, 1892.

How to Make Honey-Vinegar.

CHAS. DADANT & SON.

There are, in the formation of vinegar, two kinds of fermentation. The first transforms into alcohol the sugar, or saccharine matter of the liquid used; the second changes into acetic acid the alcohol produced. The germs that cause alcoholic fermentation exist around ripe fruits, and, to some extent, in honey, and develop best at a temperature of about 75° to 80°.

The second fermentation, which develops acetic acid, finds its germs in the atmosphere, and many take place almost immediately after the other has begun, and long before the saccharine matter has been transformed into alcohol, so that the mixture may be sweet, alcoholic and sour at the same time. It looks rather contradictory to say that a liquid is sweet and sour; but that is often a fact, nevertheless. The more prompt and thorough the alcoholic fermentation, the more readily will the liquid be transformed into vinegar when the acetic fermentation begins.

Honey does not contain the germs of fermentation in sufficient quantity to make a thorough alcoholic fermentation; and when mixed with water and left to itself, it will require several months to convert the mixture into an alcoholic beverage, and several months more to change it to vinegar.

If we are not in a hurry, we may succeed in making good vinegar by filling a barrel half full of water, adding two pounds of honey to the gallon of water, and a few gallons of fermented or unfermented cider, keeping it in a warm place, and covering the bunghole with wire-cloth, or with a piece of thin cloth, which may keep out insects and dust. By this method half a barrel of honey-water may be changed into good vinegar in two or six months, according to the temperature.

As we sell vinegar to our neighbors, but do not care otherwise to keep it for sale, we have been in the habit of keeping two barrels for vinegar. One contains the oldest vinegar, from which we draw for use; the other contains the souring liquid. As we are growers of grapes, and make wine, we are in the habit of fermenting a certain amount of honey-water in our wine-cellar, and this is used only when it has already undergone the alcoholic fermentation, and sometimes with the addition of a little wine, which gives it color, and adds to the good taste of the vinegar. This mixture is kept in the second barrel, both barrels never being more than half full; and as fast as we take vinegar from the first, we add to it an equal quantity from the other.

When honey-water has been made in such a way as to make it impossible to weigh the honey—for instance, by washing cappings or honey utensils, barrels, cans, etc., we test its strength with a fresh egg, which should float, just showing itself at the surface.

This method to induce a prompt and thorough alcoholic fermentation in honey-water is to mix it with a large quantity, the more the better, of crushed fruit, such as cherries, berries, grapes, apple pomace, or even with the pomace of grapes, commonly called "cheese," just after the fermentation of the grapes. The more fruits are used, the more thorough the fermentation.

The mixture should be kept at a high temperature in vats or open barrels covered only with muslin, or some light cloth, and the vessels should be filled only about two-thirds, so as to avoid loss, as the mixture rises like bread during fermentation.

As soon as the turbulent fermentation is over, the liquid should be drawn into barrels. This is usually after a week or so, if the temperature is right. The barrels should not be filled more than half full, as the liquid must be exposed to the air as much as possible, in order to hasten the acetic fermentation which is fed from the atmosphere, as said before. The addition of a gallon or two of strong vinegar will induce a more prompt acetic fermentation. Good authorities also recommend the use of vinegar "mother"—a slick, slimy substance found in vinegar, and which is said to be decomposed vinegar. This vinegar mother is taken from an old vinegar-barrel, washed clean, cut into pieces, and these are added to barrels of forming vinegar.

After the vinegar has undergone the main acetic fermentation, if it becomes necessary to transport it, or put it into closed barrels, it should be racked, or drawn from its lees. If cloudy, it can be made clear by putting in each barrel the white of an egg, and stirring it with

a stick. It will not become entirely clear until the last fermentation is nearly all over.

Honey vinegar is far superior to the best cider vinegar, and can compete successfully with the very best wine vinegar.

There are only two drawbacks to the making of vinegar. It takes a great deal of room, and it spoils all the barrels that are used. The acid eats up the iron hoops wherever it happens to leak, and the wood is often bored full of holes by worms, when not in use.

In making vinegar as above described, any ordinary shed, such as is used for a cider press, will do, if used during warm weather; and to keep the vinegar, any ordinary cellar is suitable; but, as we said before, a temperature of about 80° will best aid the making of vinegar.

There is a quicker method of making vinegar on a large scale, but this requires a special building and apparatus. —*Gleanings.*

Hamilton, Ills.

Wonderful Adaptability of Bees in Nature

G. W. DEMAREE.

When speaking of the works of Nature, most writers speak in a way that leaves one in doubt as to what they mean by the very hard word "Nature." It is not my purpose to discuss the question of the source of all development and all power. It is enough to satisfy me when I inquire into the marvelous adaptability of the things in Nature, to accept of the faith of the best and ablest of men who hold that no other than the great Architect of the universe could have so planned all things as to make them work with such marvelous harmony.

The honey-bee is a small factor in Nature's work's; but when her career is traced through to the end, her mission cannot be computed in value in the make-up of the total harmony. The flowers secrete nectar (and the bees, with eager, glad hum, gather it), but not for the bees alone. The flowers of fruits and plant seeds need the visits of the bees to transmit the tiny grains of pollen from one flower to another to cross-fertilize the embryo seeds that they may reproduce flowers to secrete nectar for the bees. Without flowers that produce nectar, there would be no bees, and without the bees there would be a great reduction of varieties of vegetation.

It is a well demonstrated fact that the red clover would produce no seed in this country, and presumably nowhere else, without the intervention of bees in their office of distributing the pollen from blossom to blossom.

The honey-bee has a sharp "stinger" as a weapon of defense, and she could not defend her precious stores without a dreaded weapon. The agency that gives the sharp pain from the sting of a bee, is formic acid. But the formic acid serves another purpose no less important in the economy of bee-life. It acts as a preservative to the honey by preventing fermentation.

Heat in the hive is necessary to the incubation of the eggs laid by the queen, and to develop the infant bees. But heat serves another important purpose. It holds in available form the formic acid in the effluvium arising from the body of the bees, while the honey in the open cells absorbs the formic acid, which makes the honey well-nigh imperishable. The heat also raises the temperature of the pellets of wax, and makes them susceptible of being welded and drawn out into matchless honey-comb.

The "hum" of the bee is caused by the lightning speed with which its wings beat the air, but this is not all, the "hum" is the "voice" of the bee, and is the chief means of communication between bees. The "hum" of the bee is a simple mechanical sound, as much so as the sound of the "Æolian harp;" but strange as it may seem, the honey-bee can and does express her passions by the sound of her wings. The gentle, harmonious "hum" means contentment and peace. The high, shrill "key" means fierce anger, and the experienced apiarist needs no other warning to avoid a "black eye." The "hum" that imitates the frying-pan just before dinner, means "come in," "gather into a body." But the invitation is only for "our set," none other can enter. The royal, the crowned of earth cannot cross the threshhold unchallenged if they are not of "that guild."

Honey-bees often visit deserted beehives to carry away the bits of wax and propolis they contain, and they often visit hollow trees in search of the liberated albumen and glucose substance produced by the chemical changes that take place in decaying wood, and while thus employed they unwittingly serve the economy of nature as "decoy bees'

to discover to wandering swarms places for new homes.

This beautiful and provident provision in the economy of bee-life, so often noticed by the close-observing apiarist, has led many superficial observers, in fact some well known authors, to imagine that bees systematically send out "scouts" to look up a future home for the swarm. It makes no difference how often these enthusiastic people are told that it is positively contrary to the instincts and habits of bees to do any work in advance of their wants, many of them cling desperately to the old "scout" superstition, and are deeply troubled when the light of modern research is "turned on," showing that bees, like other animals, are guided by the laws of instinct, and not by the power of an intellectual, foreseeing, calculating mind. The experience of thousands of years has demonstrated that "instinct" alone has been sufficient to perpetuate the lives of animals in the wild state.

I have alluded to the rigid exclusiveness of bees. While I know of no society of animals so exclusive in their habits as the honey-bee, I know of none so thoroughly social inside of their homes or environments. Other animals exert physical force to domineer over each other. Bees live in perfect peace, and maintain quiet and fairness under the most distressing circumstances. I have discovered large colonies of bees at the extreme point of starvation, in the early spring, everything going to show that they had divided out their scanty stores, to live or perish together.

Bees wintered well in Kentucky, and everything promised a prosperous season for them in the early spring. But since then the weather has been too wet and cool for insect life and prosperity. Our bees are badly behind with their numerical strength, and unless the season of flowers is unusually extended, there cannot be a heavy yield of surplus honey gathered this year.

Bee-keepers of Kentucky should carefully save up in one-pound boxes some of the finest honey they may take this season, to put on exhibition at the World's Fair next year; also some of the finest of their honey taken with the extractor.—*Farmer's Home Journal.*

Christiansburg, Ky.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 133.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

July 27.—S. E. Minnesota and W. Wisconsin, at La Crescent, Minn.
John Turnbull, Sec., La Crescent, Minn.

Aug. 4.—Rock River, at Morrison, Ill.
J. M. Burtch, Sec., Morrison, Ill.

Aug. 17.—Wabash Valley, at Vincennes, Ind.
Frank Vawter, Sec., Vincennes, Ind.

Aug. 27.—Haldimand, at S. Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.

Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.

Jan. 13, 14.—S.W.Wisconsin, at Boscobel,Wis.
Benj. E. Rice, Sec., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich.

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Some Noted Apiarian Visitors.

As I am just able to sit propped up in bed, I wish to tell you who visited me today. It was Dr. W. K. Marshall, of Marshall, Texas, now in his 84th year—the pioneer bee-keeper of Texas. He bought the first Italian queen ever brought to Texas—more than 40 years ago—the same queen that the late Judge Andrews, of McKinney, rode on horseback over 100 miles to see. Dr. Marshall is still an enthusiast on bees, is well posted, and yet able to preach four times a day.

W. R. Graham, of Greenville—the comb honey man of North Texas—also visited me.

Both of these friends came over to

witness the Doolittle process of queen-rearing, which they saw under full headway, and were very much pleased with it.

Bees are gathering some honey now, and I think our cotton-bloom flow is upon us, which will last until September. I have some new thoughts to write when I get able.

MRS. JENNIE ATCHLEY.

Floyd, Tex., July 15, 1892.

Bees Storing Surplus Honey.

We are having a very wet spell—it has been raining here for at least 40 days, almost incessantly. Yet, with all the rain, our bees are storing surplus honey, which seems hardly credible, but is a positive fact, for which I cannot account. JOHN HAGER, JR.

Arabi, La., July 12, 1892.

Good Fall Honey-Flow Expected.

Last winter I lost 3 colonies out of 66 in the cellar, from poor stores, I think. I put them on the summer stands on April 5 to 10, mostly in good condition, though some were weak in bees, but all had honey or honey-dew to carry them through: but owing to the cold rains, they dwindled very fast. I was sick all through May, so I could give them no care. The strong colonies robbed the weak, until I had but 32 left. They are mostly strong now, and working in surplus cases, filling them with white clover and linden honey, of which there is an abundance of bloom. Everything looks fair for a good fall flow of nectar.

J. L. FLINT.

Marion, Iowa, July 18, 1892.

Sure of a Good Honey Crop.

I began the bee-work at my home yard on April 15, 1892, with only 38 colonies of bees, a few of them being in frame hives, but most of them in log hives. To take the whole, it was a bad lot of hives to begin with. One must get ready for work, so I purchased Cook's "Bee-Keepers' Guide," and studied it well, and by experience I find it well written, easy to understand, and all correct. I also purchased an extractor, which I find very useful, as I can sell all my extracted honey here at 10 cents a pound, and retain all the combs. Now I have all my bees in hives of my own make; have increased my number to 107 colonies, each hive with 8 to 11 frames chock-full of bees. My bees did good work through May. The rain began about June 1, and it was so wet until July 7, that bees could gather no more than they consumed for brood-rearing. I am glad to say that the clouds have passed away, and we are having some fine weather, and our sourwood is in its prime, and plentiful. Sumac is yet to bloom, so I feel sure of a good honey crop yet. I see much said about bees swarming, swarm-catchers, etc. I have full control of my bees, which is easy, and will be explained in the future. W. M. SCRUGGS.

Tracy City, Tenn., July 18, 1892.

Bees in Good Condition—Punics.

The month for robbing bees is here, and what little clover there was, is gone, and the bees begin to try every colony, but they are a little too strong to give the robber bees comfort. The white clover was a complete failure again this year in this part of the country; the bees have just made a living, but they are in good condition, all strong in stores. I have had but 15 swarms from 35 colonies, making 50 in all. Our only "show" is golden-rod and asters now, which very seldom fail. What are the so-called Punic bees doing this year? I do not see anything in the BEE JOURNAL about them. Are they storing so much honey that it keeps the owner busy all the time taking it out? I have been expecting to see a large report from some one; perhaps it will come soon. WM. HOUSEL.

Wertsville, N. J., July 12, 1892.

[For something about the "Punic" bees, we refer you to page 138 of this number.—EDS.]

Paste for Labels, Etc.

On page 796, of the BEE JOURNAL for June 16, is a recipe for paste, which is full of errors. In the first place, a definite quantity of water (2 quarts) is given, and the rest is expressed as "parts." What does a "part" mean? Does it mean "parts" in relation to the 2 quarts? If it does, there would be about 2 pounds of sugar of lead—would be rather poison, would it not?

Again, the flour cannot be stirred in as directed. I have had lots of trouble getting labels to stick, and I spent $1 experimenting with that recipe, using ounces where it said "parts," but it would not stick.

I am now having paste made as follows: Good clear corn-starch paste, 1 quart; pure gum-arabic (dissolved in just enough warm water to dissolve it), 1¾ ounces; ¾ ounce of alum, and ¾ ounce of sugar of lead, the two pulverized and put into enough water to dissolve them. Mix the whole together. I am only trying this, but I have no doubt it will do the work. That recipe caused me to waste a dollar, and I write so that others may not go and do likewise.

Bees are just rolling in white clover now, and prospects are good for Spanish-needle. F. H. RICHARDSON.

Moberly, Mo., July 14, 1892.

[We are glad that Mr. Richardson wrote about his experience with the paste recipe. Of course, we cannot test everything that is published in the BEE JOURNAL, and so have to leave that to the readers. We would advise, however, "going slow" on any *new* suggestions that are offered, unless accompanied by a strong endorsement. This will apply to new things in any line, or else we all sometimes are liable to "get stuck" worse than were the labels that Mr. R. experimented with.—EDITORS.]

Asparagus as a Honey-Plant.

Please inform me whether bees gather honey from asparagus, and as to the quality, etc. I can hear them in the asparagus as thick as in the white clover. The weather here now is quite warm, and bees are working well.

R. S. MACKINTOSH.

Langdon, Minn., July 21, 1892.

[Asparagus yields pollen, but not honey.—EDS.]

Rolling the Honey in and Swarming.

Bees in this neighborhood did very poorly last winter and spring. I do not think that there was over 30 per cent. of the bees left late in the spring; what the cold, wet weather and starvation did not kill, the robber bees tried to finish. This spring was a trying one for me, which I shall never forget as long as I may keep bees. I saved 18 colonies out of 21, fall count. All spring it was too cold and wet to do anything with them, as I keep mine on the summer stands; and then they came through very weak, and staggered as if they were intoxicated. They are doing well now, as they are just rolling the honey in, but are filling the brood-chamber more than I like to see. Swarming has just fairly set in now.

The BEE JOURNAL is a welcome visitor in this house. I would not like to do without it. FRANK HENTRICK.

Wall Lake, Iowa, July 15, 1892.

Have Had a Good Honey-Flow.

I have a nice apiary of 40 colonies in fine condition, and they are gathering a fine quality of basswood honey now. I produce the comb honey; the prices range from 15 to 20 cents per pound here. It is my whole delight to handle bees. We have had a good honey-flow here this season so far, but it is getting a little dry now, though it looks as if it would rain, it has been threatening rain for several days.

I have been reading the book entitled "Bees and Honey," and it does me good to read it. J. W. FOUTS.

Missouri Valley, Iowa, July 18, 1892.

Bees in Fair Condition.

Colonies are strong in bees, and in fair condition, but no honey yet. They wintered without any loss on the summer stands, packed in chaff. I think that out-door wintering is preferable to any other for this locality, at least I am satisfied with it. We experienced a very cold and wet spring, but are having very warm weather now. I do not know much about how other people's bees are getting along in this section, as I have been confined to the house for more than two months with a sprained knee.

J. W. PETERSON.

Grand Island, Nebr., July 19, 1892.

Bees on a Bush—The Prospects.

Mr. Charles Wood, of this county, found bees working around his place the other day, and commenced baiting them, and soon had a strong "line" working, which he followed but a short distance when he found a large swarm hanging on a bush. There had been two or three rainy days, and the bees had the appearance of being there through the storm. They were undoubtedly hungry, and had built no comb.

The prospects are that we shall be obliged to record another failure in the honey crop in this locality. There is

plenty of clover, and for the past two weeks the conditions have *seemed* favorable, but it produces little honey. I am very sorry, for I am making some experiments for our Agricultural College, and am "doing" some fancy work for the World's Fair. I shall be obliged to feed back, if I get this work completed.

GEO. E. HILTON.

Fremont, Mich., July 18, 1892.

Experience in Bee-Keeping.

I commenced keeping bees in 1885, when I bought a colony of bees in a log, giving $1.00 for them. I transferred them in the spring of 1887, in the Simplicity hive, and also sold 15 colonies. I started in the past winter with 43 colonies, and sold 9 this spring, and 4 starved. I have increased the balance to 65 colonies at present. Rev. W. P. Faylor, of Iowa, sent me a sample of his six-banded bees, which was very nice. I reared a queen this spring whose progeny is as good as those of Mr. F. We have not had much honey yet. Bees are very late swarming in this locality.

B. F. BEHELER.

Jumping Branch, W. Va., July 19.

One of the Best Honey-Flows.

As I stated on June 15, there was a good honey-flow, and it still continues. Linden is just coming into bloom, and bees leave their hives in quite a rain to secure the linden bloom. My colonies have averaged 40 pounds each, already. Oh, why did not Sam Wilson tell us that we would have one of the best honey-flows in western Iowa, instead of telling what he did? Then I would not have worked so hard in the hot sun. I would have prepared in the spring, instead of now. Oh, you missed it badly, Sam. Yes, you did! THOS. JOHNSON.

Coon Rapids, Iowa, July 18, 1892.

Apiarian Patience Almost Exhausted.

Three years of failure in succession, followed by heavy winter losses, have tried the patience of bee-keepers here severely. The spring was unusually hard on bees, continued wet weather, and a honeyless fruit-bloom was not at all favorable for their wants. Feeding, however, gave me a worker-force that would mean something in a honey harvest. Clover comes in abundance; the fields are white with its bloom; hives are supered; bees are ready and waiting; but again it yields so sparingly that they search in vain for a living, so that they are consumers instead of gatherers. We are trying hard to be satisfied with the pleasure part of our pursuit, but would like to know the true cause of a honey-dearth when everything seems so favorable for its production.

A. B. BAIRD.

Belle Vernon, Pa., July 15, 1892.

Poor Season—Introducing Queens.

I commenced bee-keeping eight years ago, and now have 47 colonies. I have not had a single swarm this season, and a poorer honey crop this year than ever before. My neighbor's bees are just about starving. I am keeping mine up by feeding. We had too much rain in the spring, and it is too dry now, but I am not yet discouraged. To introduce queens, I remove the old queen at the same time, put the new queen in, in a wire cage, and at the same time give them a little sugar syrup with about ten drops of essence of peppermint. I use the cone feeder, and think it is the best that I have tried. By this plan I can introduce safely 24 out of every 25 queens. I would sooner think of being without bee-hives than without the BEE JOURNAL. JAS. M. SMITH.

Perkiomenville, Pa., July 18, 1892.

A Year's Numbers of the AMERCIAN BEE JOURNAL contain over 1,650 pages—what a wonderful amount of bee-literature for only $1.00! Could you afford to do without it at that price—2 *cents per week?* Send us the names and addresses of your bee-keeping friends, who do not receive the BEE JOURNAL, and we will mail them sample copies. We want every bee-keeper in the land to see it, and know of its value as an "assistant" in the apiary.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 133, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

AMERICAN
ESTABLISHED IN 1861
OLDEST BEE PAPER IN AMERICA
BEE JOURNAL

PUBLISHED WEEKLY BY

GEORGE W. YORK & CO.,

At One Dollar a Year,

199 RANDOLPH ST., CHICAGO, ILLS.

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An Apiary Register is a splendid book to have in an apiary, so as to know all about any colony of bees at a moment's notice. It devotes two pages to each colony. We will send one large enough for 50 colonies, for $1.00, post-paid; for 100 colonies, for $1.25; or for 200 colonies, for $1.50. After using it for one season, you would not do without it.

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When Talking About Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we offer some excellent premiums that you ought to take advantage of.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

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The American Bee Journal.....	$1 00....	
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Bee-Keepers' Guide.....	1 50....	1 40
American Bee-Keeper.....	1 50....	1 40
Canadian Bee Journal.....	2 00 ...	1 75
The 7 above-named papers	5 75....	5 00
and Langstroth Revised (Dadant)	2 40....	2 25
Cook's Manual	2 00....	1 75
Doolittle on Queen-Rearing.	2 00....	1 65
Bees and Honey (Newman)..	2 00....	1 75
Advanced Bee-Culture.....	1 50....	1 40
Dzierzon's Bee-Book (cloth).	2 25....	2 00
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Prairie Farmer.....	2 00....	1 75
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Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Almost Every Bee-Book that is now published we mention on the second page of this issue of the BEE JOURNAL. Look over the list and select what you want. For every new yearly subscriber that you secure for us at $1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apiarian knowledge among your friends.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it —his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

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This Means You.—When ordering any of the books or articles which we offer clubbed with the BEE JOURNAL, or otherwise; or when sending anything intended for us, such as subscriptions to the BEE JOURNAL, or matter for publication, *be sure* to address everything to —**George W. York & Co.**, 199 Randolph St., Chicago, Ills.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

FOUNDATION, 38 to 50 cts. QUEENS, 60 cts.—to exchange for Wax or offers.
4Atf W. E. WELLS, Wallaceburg, Ark.

WANTED—Everybody to send me 10 cents in exchange for my little book, "The A B C of Ferret Culture." It tells all about the care and management of this little animal.
25Atf N. A. KNAPP, Rochester, Lorain Co., O.

TO EXCHANGE (or cheap for cash)—25 colonies Italian Bees, in good Simp. hives, well-filled with honey. Also, Ganden Wheel Plow, Daisy, new; and good Gold Watch, new —for land, Property, or offers.
5A3 J. B. ALEXANDER, Hartford City, Ind.

WANTED.—Those having small sums of money "saved up" can find perfectly SAFE investments, at 7 per cent. interest, for long or short time, by writing to
THOS. G. NEWMAN,
199 Randolph-st., Chicago. Ills.

WANTED TO EXCHANGE—My new price-list of Italian Bees, White and Brown Leghorn Chickens, White and Brown Ferrets, and Scotch Collie Pups—for your name and address on a postal card. N. A. KNAPP,
25Atf Rochester, Lorain Co., Ohio.

HONEY AND BEESWAX MARKET.

CHICAGO, July 23—No choice comb on the market. Some inquiries for new stock, with none to offer. A good article would bring 15 @16c. Extracted is very scarce, and plenty of inquiry for same; it would bring 7@8c. Beeswax—firm at 26@27c.; good demand.
J. A. LAMON, 44-46 S. Water St.

CHICAGO, July 23. — Comb honey is dull and no demand. Selling fluest grade white at 15c. With new crop prices will rule firmer. Extracted is scarce and in good demand at 7@7½c. Beeswax, selling at 26c.
S. T. FISH & CO., 189 S. Water St.

CHICAGO, July 23.—Selling slowly, trade being in strawberries and other small fruit. No fine comb honey on the market—it would bring 15@16c. Extracted, 6, 7 and 8c., according to quality and kind. Beeswax, 27c.
R. A. BURNETT, 161 S. Water St.

NEW YORK, July 23.—No comb honey selling. Extracted, new Southern, choice, 65 to 70 cts. per gallon.; common, 60 cts. per gallon. Beeswax—26@28c., according to quality.
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., July 23.—The old crop of comb honey is all cleaned up. First shipment of new comb honey this week, which we quote at 16c. for No. 1 1-lbs.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, July 23.— Demand is good for extracted at 5@8c. Stock on hand small. Demand slow for comb honey, at 12@16c. for best white.
Beeswax is in fair demand, at 23@25c. for good to choice yellow.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, July 23.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6@7c.; buckwheat, 5@5½c.; Southern, 65@75c per gal.; Calif., 6½@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c more per lb. for extra select.
CHAS. ISRAEL & BROS., 110 Hudson St.

ALBANY, N. Y., July 23— Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.
H. R. WRIGHT, 326-328 Broadway.

DETROIT, July 23.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.
M. H. HUNT, Bell Branch, Mich.

MILWAUKEE, July 23—Demand very moderate, supply average of all grades but common quality. Best 1-lbs. 15@16c; common, 12@13c. Extracted, white, in barrels, 7c.; in kegs, 7½c; in pails, 7½@8c. Beeswax—demand fair, supply small. Price, 23@28c.
A. V. BISHOP, 142 W. Water St.

NEW YORK, July 23.—Demand is light, and supply large, except buckwheat comb. We quote: Fancy white comb, 12@14c; buckwheat, 9@11c. Extracted—Clover and basswood in good demand at 6½@7c; buckwheat ind emand at 5@6c. Beeswax in fair demand at 26@28c.
F. I. SAGE & SON, 183 Reade St.

SAN FRANCISCO, July 23.—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax—24@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street.

BOSTON, July 23—Demand is light. White 1-lbs., 13@15c. No 2-lbs. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.
BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS, Minn., July 23.—Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.
STEWART & ELLIOTT.

KANSAS CITY, Mo., July 23.—Old honey is cleaned up, both extracted and comb. New crop will be in about July 10, here.
HAMBLIN & BEARSS, 514 Walnut St.

NEW YORK, July 23.— Demand moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 120 Pearl St.

Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

We Club the AMERICAN BEE JOURNAL and the monthly "Illustrated Home Journal" one year for $1.35; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for $2.10.

The Honey-Bee; giving Its Natural History, Anatomy and Physiology. By T. W. Cowan, editor of the *British Bee Journal*, 72 figures, and 136 illustrations. $1.00. For sale at this office.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

The Busy Bees, and How to Manage Them, by W. S. Pouder. Price 10 cents. For sale at this office.

ONE DOLLAR PER YEAR.

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THOMAS G. NEWMAN, } EDITORS.
GEORGE W. YORK, }

Vol. XXX. Aug. 4, 1892. No. 6.

EDITORIAL BUZZINGS.

The Clouds which rise with thunder, slake
Our thirsty souls with rain;
The blow most dreaded falls to break
From off our limbs a chain;
And wrongs of man to man but make
The love of God more plain.
As through the shadowy lens of even
The eye looks farthest into heaven
On gleams of star and depths of blue
The glaring sunshine never knew.
—WHITTIER.

Father Langstroth, in this number of the BEE JOURNAL, tells, in quite a long article, about his sufferings with that troublesome "head-trouble." Every bee-keeper will be interested in what he has to say, and will, with him, rejoice that he is once more able to "feel like himself," and enjoy life. That he may long be thus spared to his hosts of loving friends, will be the earnest wish of all the readers of the AMERICAN BEE JOURNAL.

The North American. — We have received the following letter from Bro. Hutchinson, the Secretary of the Association, concerning the views of some who expect to attend the meeting to be held in Washington:

FRIEND YORK:—The AMERICAN BEE JOURNAL for July 28 is just at hand, and I have read the article of Mr. Benton, and your comments.

If I may judge by the letters that I am getting every day since the July *Review* was mailed, then Mr. Benton's letter voices the views of the majority of the bee-keepers. They all say: "It is too early." "It is too hot." "I can't leave then." "There will be too big a crowd—we can't take any comfort." "Won't have any money then." And so it goes.

Personally, I should prefer December, when there will not be such a crowd, and the weather will be cooler. Reduced rates we *must* have, or there will be no crowd, and that is why I favored the Encampment time; but Mr. Benton assures me that several societies will meet in Washington during the last weeks of the year, and that by meeting at the same time, reduced rates can be secured.

Although my preference would be December, I have no desire to use my influence to have it held at that time. What the Executive Board desires to know and do, is the wish of the majority. I shall write to-day to the other members. W. Z. HUTCHINSON.

The BEE JOURNAL has no preference in the matter, but only desires the time of meeting to be when the most bee-keepers can attend, and when reduced railroad rates can be secured. No doubt the question will be settled now very soon, so that all may know when they are to go to Washington, and can arrange their private affairs accordingly. By delaying until December, it will give ample time to prepare a splendid programme for the occasion.

We will keep our readers posted in regard to what is being done about deciding as to the date, etc.

Breeding-Queens. — FRIENDS: During August Jennie Atchley will mate 100 of the very *finest* 5-banded Queens to hand-picked Drones. Should you desire fine breeder, write her at Floyd, Tex.

The Woman's Committee on Bee-Culture, of the World's Fair, has been heard from. Mr. W. C. Frazier, of Atlantic, Iowa, editor of the Apiarian Department of the Iowa *Homestead*, has had some correspondence with the chairman (or chairwoman) of the committee, and writes us as follows about it:

I send you a letter from Mrs. Olmstead, which explains itself.

The cattlemen, the horsemen, the sheep, swine and poultry breeders would not touch a show where a set of women who knew nothing of their business (cattle, horses, sheep, etc., business) were going to act in the capacity of judges. Why should the bee-keepers have to?

Think of ten women selecting the "grandest rooster," or hunting out a "just perfectly lovely pig," on which to bestow the first premium! To award the premiums in the bee and honey department will require more judgment than to go over the poultry and swine, point by point, and give a reason for the awards. I know whereof I speak. There are perhaps over 300,000 bee-keepers in the United States—not more than 100 are capable of judging such a show, and not 25 of the capable ones could be induced to assume the responsibility. "Fools rush in where angels fear to tread." W. C. FRAZIER.

The letter referred to by Mr. Frazier, as having been received from Mrs. Olmstead, of Savannah, Ga., is dated July 1, 1892, and reads as follows:

Your letter of June 25 has been received, and contents noted.

As I understand the relation of the various committees from the Board of Lady Managers to exhibitors, it is two fold: *first*, to endeavor before the opening of the Exposition to awaken interest, and induce exhibitors to make a display of their wares, works, arts, etc.; and, *secondly*, in connection with the Gentlemen Commissioners, to pass judgment upon the relative merits of competitive exhibits during the time that the Exposition is opened.

I can well appreciate that the bee-keepers would prefer that only those ladies should be upon the committee in "Bees and Bee-Culture" who are practical apiarists, but if you will consider how the Board of Lady Managers was formed, you will see that it would be unreasonable to expect them to be specialists and experts. Mrs. Palmer, in making her appointments, was obliged to use the material she had.

At the same time, I would say that a capacity to judge of results, is not necessarily allied to the ability to create. The Committee on Fine Arts, for instance, might well judge of the merits of pictures and statues, without being able to paint the one, or chisel the other.

I do not profess to be a skilled bee-keeper, but to the best of my powers I am informing myself on the subject, and hope to be able to do my duty when the time comes.

I trust that you will send a fine exhibit to the Fair, and that I shall have the pleasure of meeting you there.

Very Respectfully Yours,
MRS. CHARLES H. OLMSTEAD,
Chairman of Committee on Bee-Culture,
(Lady Manager for Georgia.)

We do not understand that the Commissioners, either gentlemen or ladies, are to award premiums in any of the departments of the World's Fair, but that various Superintendents will be appointed who will have in charge particular portions or exhibits of the Fair, and will aid in making the awards upon competitive exhibits. We may not be correct in this, but such is our understanding of the matter. Perhaps Dr. Mason can give us more light.

A Swarm of bees located recently in the vase that crowns the tall column of the left side of the principal entrance to the building which contains the Agricultural Department at Washington, D. C. So "Uncle Jerry" Rusk is now a bee-keeper. It ought to serve as a hint that the Government should do more for bee-keeping. Friend Benton will now have at least one colony to experiment with.

Mr. N. Awrey, of Canada, has been selected to take charge of the Canadian apiarian exhibit at the World's Fair next year. The Dominion Government will pay for cases at the Fair, and also all cost of transportation to and from the Exposition, so that no expense will fall upon the exhibitors.

The Bee-Age, we understand, "has been dropped for the present." It was one of the *new* bee-papers that blossomed a few months ago. We never saw even one copy of it. We also learn through the *Progressive Bee-Keeper* for July (which, by the way, only got so far as to print the *cover* for June) that "there will be a very large crop" of new bee-papers in the near future, if all who think of starting them "carry out their plans." With the poor honey seasons of the past few years we should think that it would be rather discouraging business to start new bee-papers. But then, it is easy enough to *start* them—the trouble seems to appear when their publishers try to *keep them going.* Of course, we have the very kindest of feelings toward every one who is interested in the pursuit of bee-keeping, or who tries to advance its literature; and that is just the reason we do not like to see our apiarian friends lose their money, either by starting new bee-papers, or by subscribing for them. Once in awhile there is an *exception*, we are glad to say.

Mr. H. K. Staley, of Pleasant Ridge, Ohio, called on us last week, and found us trying to "keep cool." Mr. S. is much interested in electrical matters, as well as in the "busy bee." Many of our readers will remember his interesting and well-written articles which have appeared in the BEE JOURNAL during the past five or six years.

Good Country Roads is a subject which is now being much agitated, and well may it be, for who has a better right to receive help from the Government than those who pay the taxes—the country people? There is now a Memorial before Congress on the subject of a "Comprehensive Exhibit of Roads, Their Construction and Maintenance at the World's Columbian Exposition." It is desired that our readers write to their Members of Congress for copies of the Memorial; and also urge their representatives in Congress to vote for the Bill which provides for this comprehensive road exhibit.

The passage of this Bill will result in the saving of millions of dollars annually, as the exhibit will teach the best and cheapest method of making good country roads in all parts of the United States. As vast sums of money are spent every year in the construction and maintenance of the highways of this country, it is of the greatest importance to show the people how to use this money to the best advantage.

The establishing of a permanent road exhibit and a college for road engineers at Washington, D. C., is also contemplated.

The World's Fair presents a magnificent opportunity to inaugurate a great national movement for improving the highways of the country. Let all labor together to bring about this result. If the people will now speak to their representatives in no uncertain tone, the work will be accomplished.

The Bee-Supply Business seems a great attraction to many bee-keepers. In one of our apiarian exchanges we read this sentence recently, by one of our prominent bee-keepers and queen-rearers: "If I had a bee-journal I would go into the supply business." It was really amusing to us. Just as if a bee-keeper must have a bee-paper in order to go into the supply business! It must be that some people think that a bee-periodical is simply a catalogue for apiarian supplies. Though there may be some excuse for so thinking, when looking over some of the bee-papers, yet the *best* ones, we think, are true to what they profess to be.

As far as the AMERICAN BEE JOURNAL is concerned, it is now perfectly free and independent of the bee-keepers' supply business, as all well know who read it from week to week. We may change our minds some day, but we now really believe that a periodical of any kind can render the best service to an industry of which it is the exponent, when not interested financially in the various appliances used in such industry or pursuit.

Read S. F. & I. Trego's Advertisement.

The Apiarian Exhibit at the World's Fair, and also the Rules governing the same, were mentioned on page 793 of the BEE JOURNAL for June 16, 1892. In reply to a question which we asked Mr. Buchanan, he wrote thus:

I beg to say that the formal notice sent out by the Director-General, and which you printed, has application to all individual exhibitors, and states the method to be adopted by this Department regarding the honey exhibit.

We expect the State Commissions from the different States to furnish these cases, and the individual producers of honey, through their State associations, or through the State Commissions, to make the exhibit. We have sent a letter to the Executive Commissioner of each one of the honey-producing States, asking him to state definitely the length of case that will be desired by his Board to accommodate the exhibits of honey from his State. This arrangement, of course, does not contemplate in any way the exhibit of appliances and implements. These will be exhibited by the manufacturers, and this Department will treat each application individually.

Very Respectfully Yours,
W. I. BUCHANAN,
Chief, Department of Agriculture.

Sealed Covers and Absorbents still occupy considerable attention in bee-periodicals. Bees must be kept dry. In a warm, dry cellar, with the hives raised from the bottom boards, it matters little, so far as the bees are concerned, whether the covers are sealed or not. Out-of-doors the covers must be *protected* if they are left sealed, then they will be warm, and there will be no condensation of moisture *over* the bees; it will take place at the sides and corners of the hive, or near the entrance. If the cover is removed, and the bees covered with some porous packing, the moisture will pass up through the packing and condense above it. Packing should never be used with the intent that it should absorb and *retain* the moisture. There must be abundant ventilation above the packing to allow the excess of moisture to pass off.—*Bee-Keepers' Review.*

Several Eggs in a Cell, Etc.—Mr. A. P. Raught, of Volo, Ills., on July 18, 1892, wrote thus about his experience with queens:

Please answer these questions in the BEE JOURNAL:

1. I have a young Italian queen that lays sometimes two and three eggs in a cell. Has any one had the same experience? If so, what is the result?

2. Also, I gave to a queenless colony a frame of brood with eggs and larvæ on July 7, and on July 15 they had a queen hatched. What would be the result of such a queen? Would she be good for anything? A. P. RAUGHT.

The foregoing questions we referred to Mr. G. M. Doolittle, who has kindly replied as follows:

1. If the colony is small, this shows that the queen is a good, prolific one, or she lays more eggs than the bees can care for. If the colony is strong, and the queen lays those in only a few cells, she will probably prove a drone-layer, or else worthless.

2. Eight-day queens are of not frequent occurrence, and rarely become fertile. They are prolific for a few months, and die of old age before a year is past. The older the larva when fed for a queen, the shorter the life of such queen.—G. M. DOOLITTLE.

The Marion County Agricultural Fair will be held at Knoxville, Iowa, on Sept. 20 to 23, 1892. We have received the Premium List, which is a very neat 80-page pamphlet. In it we find the following under "Bees, Bee-Products, and Bee-Keeping Implements," with Mr. J. W. Bittenbender, of Knoxville, as Superintendent:

Italian queen with her bees in observatory hive.....	$1.50	$1.00
Comb honey, best display of not less than 20 lbs..	1.50	1.00
Extracted honey, best display, not less than 20 lbs.	1.50	1.00
Beeswax, 10 pounds.....	1.00	.50
Display of honey plants...	1.00	

Butterflies to the number of 150,000 will be shown in the Pennsylvania exhibit at the World's Fair. The collection is said to be the most complete and finest in the world.

Making Honey-Vinegar out of much that is usually wasted in cappings, pieces of comb, etc., is a splendid way to economize in the apiary, and at the same time have something really valuable after the work is done. Bro. Hutchinson, in a recent number of the *Bee-Keepers' Review*, in his terse and thoroughly practical way, remarks thus on this matter of making honey-vinegar:

In the close times that bee-keepers are now having, it is well to look after all the odds and ends; to see that no scraps of comb are thrown away, and that the rinsings from the cappings, or utensils that have contained honey, are not wasted. In many an apiary I presume that enough of these rinsings are thrown away in a year to make a barrel of vinegar.

On page 146, Messrs. Dadant & Son, tell just *how* to make honey-vinegar—they tell it in such a plain way that all can understand it, and profit by it.

An Experience with Punics—On page 14, we published Father Langstroth's impressions of the Punic bee—impressions which he received while on a visit to the apiary of Bro. A. I. Root, editor of *Gleanings*. In the number of that paper for July 15, just received, we find the following interesting editorial experience, which we reprint for the benefit of those who are anxious to hear of reports concerning the so-called Punic bees:

Our Punics are doing no better in honey—indeed, we doubt whether they are doing as well—as the average colony of Italians of equal strength; and, with the exception of the Cyprians, they are the *meanest* bees we ever brought into the apiary.

July 4 we wanted to show A. I. Root the new race. He at once suggested that we open the hive without smoke, which we did, perhaps a little unceremoniously. The air was immediately filled with hundreds of mad bees; and so persistent were they that *we* gladly ran for a veil and smoker, although Mr. R., true to his aversion for bee-veils, crouched down under a sheltering grapevine with his hands up to his face.

We then smoked the bees, but they boiled all over, about as bad as black bees; and, like black bees, they would hold themselves suspended on the wing, perfectly motionless, apparently, with the exception of the wings, right before the eyes, in a tantalizing way. By the way, we would prefer to be stung, and done with it, then to be held in constant fear of it.

The next day one of our boys attempted to run a lawn-mower some few rods away from the Punic colony; but he was very glad to put on a veil, and even then the little scamps pestered his hands.

When Mr. Langstroth was here, and shortly after, we took every precaution to keep the bees quiet, or at least not to arouse them unnecessarily, for we did not wish to test the temper of a new race of bees in the presence of one whom, at his advanced age, stings might be next thing to serious. The bees were also younger when he was here, and, of course, gentler. Now that they are two or three weeks older, they are regular little demons, unless handled carefully. We should state this, however, that they delight more in bluster and angry buzzing than in actual stings.

In our last issue, we stated that they were the worst bees for depositing propolis we ever saw. For example, we have a crate of sections on their hive; and even before there was an ounce of honey put in them (there is not more than a few ounces now in the whole crate) these Punics besmeared the sections all around the edges in six days, in a way that is worse than any hybrids ever thought of doing in six months.

If our Punics are a fair sample, we do not see how any one can regard them as gentle; and more and more they are beginning to show the regular characteristics of the common black bee.

Bee Journal Posters, printed in two colors, will be mailed free upon application. They may be used to advantage at Fairs over Bee and Honey Exhibits. We will send sample copies of the BEE JOURNAL to be used in connection with the Posters in securing subscribers. Write a week before the Fair, telling us where to send them. We would like to have a good agent at every Fair to be held this year. Here is a chance for a live man—or woman.

Dissatisfied Humanity.

A man in his carriage was riding along,
A gayly dressed wife by his side ;
In satin and laces she looked like a queen,
And he like a king in his pride.

A wood-sawyer stood on the street as they passed,
The carriage and couple he eyed,
And said as he worked with his saw in a log ;
"I wish I was rich, and could ride !"

The man in the carriage remarked to his wife,
"One thing I would if I could—
I'd give all my wealth for the strength and the health
Of him who is sawing the wood."

A pretty young maid with a bundle of work,
Whose face as the morning was fair,
Went tripping along with a smile of delight
While humming a love-breathing air.

She looked on the carriage ; the lady she saw,
Arrayed in apparel so fine,
And said, in a whisper : "I wish from my heart,
Those satins and laces were mine."

The lady looked out on the maid with her work,
So fair in her calico dress,
And said : "I'd relinquish position and wealth
Her beauty and youth to possess."

Thus it is in this world, whatever our lot,
Our minds and our time we employ
In longing and sighing for what we have not,
Ungrateful for what we enjoy.

—Selected.

QUERIES AND REPLIES.

Progeny of Italian Mated with Black.

Query 830.—Do you believe that an Italian queen, yellow or dark colored, mated with a bla k drone, will produce all three or more yellow banded worker bees ?—N. C.

No.—A. B. MASON.

No.—C. C. MILLER.

No.—H. D. CUTTING.

No.—EUGENE SECOR.

No.—J. P. H. BROWN.

I doubt it.—E. FRANCE.

Yes.—J. M. HAMBAUGH.

No.—MRS. L. HARRISON.

No. No.—MRS. JENNIE ATCHLEY.

Yes, but not often.—MRS. HEATER.

She will produce hybrid bees.—G. M. DOOLITTLE.

No; but as some of the bees—yes, many of them—will have all the bands according to the law of variation, it would seem that a case might be possible where *all* could be three-banded.—JAMES HEDDON.

An Italian queen so mated might, or might not. I have no doubt some Italian queens so mated would, while more would not.—R. L. TAYLOR.

I think not. All such queens have appeared to produce many one and two banded bees with me; also many with no bands at all.—C. H. DIBBERN.

Yes. I have had such hybrid queens. The workers are disposed to be ugly, and if queens are reared, the mixing with black blood will be seen at once.—G. L. TINKER.

Not unless they have been bred in-and-in for color only, for several generations. The mismated daughters of imported queens all produce some black bees.—DADANT & SON.

I think that some Italian queens that have mated with black drones will produce bees that are all, or nearly all, three banded. Some of the lightest colored bees I have ever had, mixed with the black race, the grandmother of the queen being a pure black.—M. MAHIN.

I think that in rare cases she might do so, which would show great prepotency on her part. In most cases, there would be workers one and two banded, and possibly without any of the yellow bands. Crossing bees works just as crossing higher animals.—A. J. COOK.

Yes, to some extent. She *may*, however, produce no three-banded bees, but as the blood is mixed, the liability is to produce bees with three, two and one yellow band, and some as black as though no yellow blood existed. This has been tested, and found to be so in hundreds of apiaries.—J. E. POND.

No. Such a case has never come under my observation. And I go further, and say that not all Italian queens, "yellow or dark colored," though mated with a male of her own race, will produce *all* "three or more" yellow banded worker bees. There is no further room to doubt that the Italian bee is a thoroughbred produced by nature. She is not a pure blood. Hence the necessity of breeding her to a type agreed upon by common consent. Three bands may not be as high a standard as some may aspire to. The field is open.—G. W. DEMAREE.

Yes; such a case is quite possible, but generally such a queen would produce bees having one, two or three bands—regular hybrids—or no bands at all. It all depends upon the stock the queen descends from—her strength and potency.—EDITORS.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

An Account of My Head-Trouble.

REV. L. L. LANGSTROTH.

For many years, as most of my readers know, I have suffered from what I have been wont to call "my head-trouble," which not only unfits me for mental exertion, but also disqualifies me for enjoying almost anything personal to myself. While under its full power, the things in which I usually take the greatest pleasure, are the very ones which distress me most. I not only lose all interest in bees, but prefer to sit, when they are flying, on that side of the house, where I can neither hear nor see them. Gladly, if at all convenient, would I have my library of bee-works hidden from my sight; and often I have been so morbid that even the sight of a big letter B would painfully affect me.

At such times, fearful of losing my reason if I allowed my mind to prey upon itself, I have resorted to almost constant reading to divert my thoughts. The great objection to that is, that it not only fails to interest me when I am the most unwell, but by association of ideas, too often deepens my distress. To use the words of the old poet Herbert—

> My thoughts like case-knives are;
> They pierce me to the heart.

I have, therefore, for years, read less and less, and occupied my time mainly with chess, which is too impersonal to suggest the melancholy ideas which so often torment me when reading. As soon as I awake I try, by chess problems, the most intricate that I can find or invent, to forestall the approach of gloomy thoughts, continuing to play as though a fortune could be made by it, or as if I were playing for my very life; and often, during the large part of the night, my brain seems to be incessantly moving and supervising the pieces on the chess-board. (I *very* seldom play with any antagonist—on an average, not as often as once a year, lest I should abuse their time.)

Methinks I hear some of my readers exclaim, "Can this be the condition of a minister of the gospel of Christ? Ought not the blessed promises of God's word always to enable him to attain, in some measure at least, to the apostle's experience when he said, "Now the *God of hope fill* you with *joy* and *peace* in believing, and make you to abound in hope, by the power of the Holy Ghost?" No! no! God has not promised to overrule his natural laws by constant miraculous interposition. Can you give a wholesome appetite for food to a person intensely nauseated, by merely showing it to him and inviting him to sit down and partake of it? He knows that the food spread before him is good; but can this knowledge give him an appetite for it?

It is a great help, doubtless, even under the most depressing circumstances, to know that God is good, and to hope that, in due time, the dark side of the picture will be turned from us, and its bright one again be displayed. This hope often sustains us when otherwise we might be utterly cast down.

Read the 42d and 43d Psalm, if you doubt what I affirm.

"My tears have been my meat day and night, while they continually say, 'Where is thy God?'" (The Psalmist undoubtedly had in mind those who say, "Of what worth is a religion which can leave a believer so despondent?") "When I remember these things, I pour out my soul in me; for I had gone with the multitude, I went with them to the house of God, with the voice of joy and praise; why art thou cast down, O my soul, and why art thou disquieted within me? Hope thou in God, for I shall yet praise him for the help of his countenance. O my God, my soul *is cast down within me.* Deep calleth unto deep, at the noise of thy waterspouts. All thy waves and thy billows have gone over me. Why art thou cast down, O my soul? Hope thou in God; for I shall yet praise him who is the help of my countenance and my God." *Not now! oh, not now! but I shall yet praise him.* "Oh, send out thy light and thy truth! Let them lead me; let them bring me to thy holy hill, and to thy tabernacles. Then will I go uto the altar of God, unto God, my exceeding joy. Yea, upon the harp will I praise thee, O God, my God!"

In the 30th Psalm we have the experience of one who, out of the deepest depression, had been raised to the heights of joy and gladness. "O God, my God, I cried unto thee, and thou has delivered me! Thou hast brought up my soul from the grave. Sing unto the Lord, all ye saints, at the remembrance of his holiness; for his anger endureth but a moment, and in his favor is life. Weeping may endure for a night, but joy

cometh in the morning. Thou hast turned my mourning into dancing. Thou hast put off my sackcloth, and girded me with gladness."

If further confirmation is needed, see the book of Job, the 3d chapter especially, when, in the profoundest depths of depression, he even cursed the day in which he was born. "Wherefore is light given to him that is in misery, and life unto the bitter in soul, which long for death, but it cometh not; which are glad when they can find the grave? Why is light given to a man whose way is hid, and whom God hath hedged in?"

I quote so largely from the blessed book, because I hope that some of my readers, almost overpowered by gloomy forebodings, may find help, and much more, from my own personal experiences, and from their confirmation by God's word. Of the Psalms in particular, it is evident that all of them which express our strongest emotions could have been born only out of deep, personal experience; some,

"When gladness wings our favorite hours;"

others, when we are almost disposed to repeat that anguished cry of our Savior, "My God! my God! why hast *thou* forsaken me?" Only thus originating could they have lived in the memory of man for so many ages. As in water face answereth unto face, so the heart of man, and I earnestly hope that some afflicted brother or sister who has been crying out, "All thy waves and all thy billows have gone over me," may be helped by this recital of my sufferings, and much more helped by realizing that the great Father of our spirits, who pitieth his children, who knoweth their frame, and who remembereth that they are dust, has caused special Psalms to be written, even for them.

To resume the description of my own experience:

I entered Yale College in my 17th year; and can remember that, even before that time, I had times when I lost my usual interest in my studies. Twice, in college, they were entirely suspended; but neither my parents nor myself, at that time, had any idea of what was the matter with me.

While tutor of mathematics at Yale, from 1834 to 1836, I was similarly affected; so, also, when pastor of the old South Congregational Church in Andover, Mass.

I was at last compelled to resign my pastorate, and became principal, successively of the Abbott Female Seminary, and the High School for young ladies, at Greenfield, Mass., and afterward accepted the charge of the Second Greenfield Congregational Church. During the latter part of this charge I made many of my sermons on foot, walking long distances, and trying severe exercise to get the better of the incipient attacks. Never, however, was I able to effect this.

An attack might be of longer or shorter duration before it prostrated me; but it always had but one issue. Struggle as I would, fight as I could against it, my condition was that of the man lost in the quicksands, so vividly described by Victor Hugo. Walking carelessly over its treacherous surface, he first notices that his freedom of movement is somewhat impaired; but he thinks little of this until he finds it more and more difficult to lift his feet. Alarmed at last, he vainly tries to escape to the firmer land, only to find that each step that he takes sinks him deeper and deeper, until the engulfing sands reach his lips, and his shrieks of agony are stilled. His head disappears; only the faint motion of a sinking hand is visible, and soon every trace of him dispears forever.

The first light thrown upon my case was by a German physician, who told me that my brain troubles were caused by blind piles; but he failed to cure me.

I shall never forget the remark of an electric physician, who, in 1853, while passing his hand over my neck, exclaimed, "How can a man with the flesh over his spine, in such a rigid condition, be otherwise than miserable!" This was the first time that my attention was called to the abnormal congestion of the flesh over the whole length of my spinal column. "You will be happy," said he, "as soon as I relieve you of this congestive condition." He worked upon my spinal column at intervals for several hours a day, rubbing and kneading it, much as they do in the massage treatment, all the while passing a current of electricity through his own body into mine, until at last he effected what seemed to be a perfect cure. He died before I could avail myself of another treatment.

So intimate is the connection between this rigidity and my mental depression, that they are never dissociated; but in vain have I called the attention of able physicians to this feature of my case. When it began to develop they never succeeded in arresting it.

While a considerable time, often several months, elapsed from the time I

could first perceive that another attack was coming on, recovery from these attacks has almost always been very rapid. Let me describe my recovery from my last attack, which had lasted over three years :

In the winter of 1891 I suffered from grippe, complicated with other dangerous symptoms. Our change of residence in Dayton, in April last, seemed to my daughter, to give me considerable relief, although I was not myself assured that I was substantially better. In walking to church on the morning of April 17, I stopped for a moment to notice the bees working on the fruit-blossoms. If the worst of the attack had not been over, instead of stopping I should have given the bees a wide circuit to avoid the sight of them. The next day I retired to my room after breakfast, to get, if possible, more sleep. In my diseased state my sleep is so poor that I often spend at least twice as many hours in bed as when well. (Had it occurred to any of them to try the *Moxa* cauterizing of my spine, by which Dr. Brown-Sequard cured Senator Sumner, it might have succeeded.)

My mind became unusually active ; my thoughts darted with great rapidity from one subject to another, when, almost instantaneously, the oppressive burden of gloom seemed to be lifted from me, and I cried out in joyful ecstasy, "O blessed Father ! I shall be well again." From long experience I recognized the usual signs of a recovery, which I might hope would last for half a year, a whole year, or possibly a year and a half. When this change comes, an electrical thrill seems to pass through my hands, extending itself to the very tips of my fingers, just as though something like quicksilver were forcing itself through them for an exit. At times this sensation is so powerful as to be quite painful. I never have these symptoms except when I am free, or soon about to be, from the head-trouble.

And now begins a period of mental activity and intense enjoyment. My dear wife used to say, "Although you have been a great sufferer at least half of your life since I first knew you, yet none of my acquaintances seems to have got so much enjoyment out of life as you ; for when you are happy, you are so intensely happy." To this I at once replied, "I could wish that this happiness might be spread a little thinner, if only it could thus be made to last a little longer."

My mind now seems to work with almost lightning-like rapidity, and I feel as though I could keep many persons busy, in merely writing out my thoughts. Every one to whom I try to explain myself, or whom I ask to execute my directions, seems to catch my thoughts, or to obey me, so slowly that with great difficulty can I repress my impatience ; and often I can hardly refrain from seizing hold of them to push them into swifter execution. In the night my brain is disposed to work as it were double tides, until I quite wear myself out.

We read of intermittent springs which discharge no water until they are full enough for a syphon arrangement. Then they gush forth and flow until entirely empty, to remain quiescent until they are full again. After long depression, seldom speaking unless personally addressed, shutting myself up in my room, I seem to act (Ps. 88:8.—*I am shut up ; I cannot come forth.* No commentator, so far as I know, seems to me to have apprehended the full meaning of these words. Only profound *melancholia* can adequately interpret them) as though I had been cheated out of my legitimate amount of talk, and must make up for lost time by uttering as much in a few days as any reasonable person ought to say in as many months.

I am sensible that this exuberance is often so great as to be oppressive to my friends ; but I do not despair, although over 81 years of age, of learning to control it better. Sometimes, however, it seems to have its advantages ; for after I have given scarcely a willing thought to anything connected with bees, for a year or more at a time, I have, in a very short time, regained my position in the mass of inventors, and often been able to keep step with those who have been forced to leave the ranks.

Dayton, Ohio, July 4, 1892.

Honey-Predictions and Foul Brood.

SAM WILSON.

On page 85, I notice that Mr. J. M. Pratt says my predictions have failed in his part of Kentucky. It has failed there, as it has in almost every other place, because bees could not get out to gather the honey on account of the unfavorable weather which has prevailed over the entire country up to the date of his letter. I only claim to know whether flowers will contain nectar or not—I do not claim to know anything about the weather. Reports so far show that the flowers have plenty of nectar, but the

weather will not allow bees to get out to gather it. If the clover has plenty of nectar, my predictions hold good. The western part of Kentucky ought to have had a better honey-flow than in Shelby county, and east of there. I hope that bee-keepers will report if they have had a failure. Please state what caused it—bad weather, or for the want of nectar in flowers. Nature does not make nectar in a day, in a week, nor in a month; it takes as long to make it as it does to make corn and wheat, and it comes from the earth, the same as corn and wheat.

I have read what Mr. C. J. Robinson has written about "foul brood," and I think his theory is right about its origin. Some particular colony of bees had to take the disease sometime without getting it from other bees, and if it can start once, it can do so again under the same conditions. The idea that foul brood cannot originate seems very foolish to me. If it did not originate, how did it get here?

Cosby, Tenn., July 18, 1892.

The Mating of Queen-Bees.

S. E. MILLER.

Queries 819 and 820 (pages 668 and 698) are such that may never be accurately answered; nevertheless they are questions of vital importance, and we should do our best to arrive at something as near the facts as possible.

Let us put the question in this shape: If I have only Italian drones, and a neighbor within 1½ miles of my apiary keeps black bees, may I expect to have the greater part of my Italian queens to be purely mated? The best we can do in this matter is only conjecture, and varies in the minds of leading lights in bee-culture, from one to four miles.

Many believe that drones congregate in great numbers, and that the queens fly among them and find a mate. For my part, I am inclined to believe that the loud noise overhead, that is taken to be a congregation of drones, is nothing more than the workers going to and from a certain field. But admitting that drones do congregate, let me ask what there is in the instinct or nature of a drone that would take him three or four miles from the apiary to meet his comrades; and how does he know just where this "convention" is going to be held, so far from his home? (Have they a "secretary?") Is it not more reasonable to suppose (for supposition is all that we have to go by) that the drones would congregate within a short distance of the apiary, where each drone, after making a few circles about the apiary, will come within hearing of the "officers," and first members of the convention that have arrived, and join them?

But let us imagine that the convention is called to order. The next thing on docket is to make a loud noise to attract the attention of queens that may be out in search of a mate. Now let us go to a hive where there is a virgin queen about five days old. She comes out of the hive, and in all probability this is the first time that she has seen the outside of the hive. Does instinct teach her that in one certain direction, some three of four miles away, a great number of drones are congregated awaiting her arrival? How does she know in which direction to go?

Have we any reason to believe that the All-Wise Creator should so arrange it that this most important inmate of the hive should endanger her life among rapacious birds and insects by flying so long a distance? Would it not be more reasonable to believe that a queen, when she leaves the hive, makes a series of circles, each time making a larger circle, until she comes within hearing of the drones? or, what is more reasonable, meets a drone that is circling about the apiary in a similar manner? Which theory looks most reasonable? A queen and drone mating two or more miles from any apiary is no evidence to the contrary, as both may be from a tree, or trees, in the woods.

Early in May, in passing through the apiary, I noticed a commotion among the bees in front of a nucleus hive having a queen about five days old. I sat down to watch, and soon saw the queen appear, but could not tell whether she came out of the hive or returned from a flight; I think the former. She took wing, and I looked at my watch, and when she returned she had been gone five minutes. She remained a minute or more, and flew away again, and this time was gone only about one minute. This she repeated once more, and returned without meeting a drone, and went into the hive. The day was cool, and partially cloudy, with the sun shining intermittently, and only a few drones were flying.

Then followed a week or more of weather that bees flew scarcely any, and when a warm day came I witnessed a

repetition of what I have described above. This queen finally mated when she was 21 days old, and turned out to be a good layer.

Testimony seems to be pretty strong that drones do congregate, but why should we assume that they go three or four miles from the apiary to do so? Some one may say, that is a provision of nature to prevent in-and-in breeding, but I should say that is assuming too much.

Do the *males* of quails and other gregarious fowls go miles away from the covey with which they were reared, to find a mate in pairing time? or do they choose a mate out of the flock they are with?

I should say, keep plenty of Italian drones and no black ones in your own yard, and the greater part of your Italian queens will be purely mated, if there are no black drones reared nearer than two miles from your apiary.

Bluffton, Mo.

Missouri State Bee-Keepers' Convention.

The sixth semi-annual convention of the Missouri State Bee-Keepers' Association was held at Warrensburg, Mo., on April 6 and 7, 1892.

The convention was called to order at 2 o'clock p.m., by President G. P. Morton. The Secretary being absent, Mr. A. A. Weaver was chosen as Secretary, *pro tem.* He then read the report of the previous meeting, which was accepted, after which 12 new members were enrolled.

The President then read his address, which was referred to a committee of three for examination, and report. The committee appointed were Messrs. R. A. Leahy, G. A. Ashworth, and L. W. Baldwin.

Mr. W. S. Dorn Blaser, of Higginsville, then read an essay on "Apicultural possibilities and difficulties," which was discussed at some length.

An essay on the "Grading of Honey," was read by Mr. C. C. Clemons, of Kansas City, which was also discussed, and some attention given to the size and weight of sections. A committee was also appointed to examine Mr. Clemons' essay, and report at the evening session.

After a short recess, the President appointed as a Committee on Resolutions, the following: J. S. Atkins, J. H. Jones and C. C. Clemons; and Messrs. G. H. Ashworth, J. S. Atkins, and L. W. Baldwin were appointed to answer questions placed in the question-box.

Mr. G. P. Morton, of Prairie Home, then read an essay entitled, "Spring dwindling of bees." The essay, condensed, embraces these points:

See that every colony is provided with a vigorous, prolific queen.

Breed full stock of young bees in the fall.

Supply with abundance of stores.

Use spring protection if you do not protect through the winter.

If these points are closely observed, and just a little attention given the bees in the spring, you need have no fears of spring dwindling.

After a discussion of the essay, the question-box was consulted, and the following questions answered:

To which is apiculture more profitable—the honey producer or supply dealer? The honey producer.

What is a suitable location for successful honey production? Where there is plenty of white clover and linden.

Can comb honey be produced without separators, and be classed first grade? It is not practical.

EVENING SESSION.

The committee on the President's message reported, by having the message read by paragraphs, and passed on by the convention, as follows:

1. The arrangement for the World's Fair exhibit was left to the Executive Committee.

2. Experimental Station was laid over for Executive Committee's report.

3. Amendment of Constitution to have one meeting a year instead of two. The motion to amend the Constitution was lost.

4. Classification of freights on extracted honey. Dicided to postpone indefinitely.

5. Affiliation with the North American Bee-Keepers' Association. Laid over until fall meeting.

6. Consolidation of the Missouri Bee-Keepers' Association with the Horticultural Society. It was decided not to consolidate.

The convention then adjourned to 9 a.m., April 7.

SECOND DAY—MORNING SESSION.

The convention was called to order at 10 a.m., by the President.

It was decided that a part of the time taken up by the regular programme be

set apart for the ladies of the World's Fair Committee.

GRADING OF HONEY.

The committee on Mr. Clemons' essay on "Grading Honey" reported by recommending the adoption of the system recommended in the essay. The report was accepted, and the committee discharged. The grades recommended are as follows:

No. 1 White Comb should be all white, good flavor, combs straight, even thicknees, firmly attached to sections. Cells well filled, with white cappings, except those next to the wood. Wood slightly soiled with travel stains not barred from this grade.

No. 2 White Comb should be white, good flavor, white or light amber cappings. Sections not less than three-fourths filled and sealed.

No. 1 Amber Comb should include all amber honey of good flavor, combs straight, and even thickness, firmly attached to the sections. Cells well filled and sealed, except those next to the wood. Wood slightly soiled from travel stains not barred from this grade.

No. 2 Amber Comb should include all honey of good flavor, irregular combs, and any color. All sections at least three-fourths filled.

Extracted, White, should be light, good flavor and clean.

Amber, should be light, good flavor, and clean.

Dark, should include all honey of good flavor and too dark to grade amber.

The Secretary then read an essay by Mr. E. T. Flanagan, of Belleville, Ills., entitled, "The future outlook for honey production." The essay was discussed, the weight of the discussion being that the future outlook of the honey production is favorable.

Mr. P. P. Collier was appointed to serve on the Executive Committee on the World's Fair subject, the committee to report at 3 p.m.

It was decided that the convention be held over until Friday, and a telegram to this effect be sent to Mr. Gwinn, of the World's Fair Commission.

AFTERNOON SESSION.

The place of the next meeting was declared the first order of business. Independence and Appleton City were proposed, and Independence was then selected.

On motion, the time for holding the fall meeting was placed between the 1st and the 15th of October..

The report of the Executive Committee was read as follows:

The committee recommends that we ask the State to give an appropriation of $5,000 for an exhibit at the World's Fair of the products of the apiary, such as honey, beeswax, foundation, honey-vinegar, bees, hives, sections, honey extractors, wax extractors, etc.

We also recommend that we pay about 20 cents per pound for the amount of comb honey, and 10 cents per pound for extracted honey necessary to make the display, honey to be shipped to Kansas City or St. Louis for inspection and acceptance.

We further recommend that the association authorize your worthy President (after we know that we will get an appropriation sufficient to justify an effort in preparing an exhibit) to proceed to investigate where he can get the necessary products for the display, and that the association bear the expense of the correspondence.

Also, that the association empower him to call a meeting of the Executive Committee at any time he may deem it necessary.

JOHN CONSER.
P. P. COLLIER.
C. C. CLEMONS.
J. S. ATKINS.
G. P. MORTON.
Committee.

The report was adopted.

The financial report of the Secretary was read, and it was ordered that the amount due him be paid. A special contribution amounting to $7.50 was taken to pay the account.

QUESTION-BOX.

The following questions were taken from the question-box and answered:

What can be done to prevent the use of propolis by the bees? But little, as our best honey producers are great propolizers.

What is the best method to prevent increase? Let the colony swarm once, and double back all after swarms.

What objection have the honey producers to paying 10 per cent. commission for selling their honey. No objection, when commission men give it their special attention.

Mr. J. W. Rouse then read an essay entitled, "Some Light on the Winter Problem." The subject was discussed at length, and condensed by J. H. Jones, of Buckner, as follows:

Prepare your bees well in early fall by feeding, if necessary, with good,

wholesome food, and pack well with good packing all around and on top.

QUESTION-BOX.

The following questions were taken from the question-box and answered:

Should beginners buy bees in box-hives, and if so, how many? Buy the best bees and the best hives you can get.

What superiority do the Carniolans possess over others? Nothing offered.

Mr. John Conser, of Sedalia, read an essay on "Hives and New Methods Against Swarming and its Causes." The subject was discussed to some extent, after which J. West Goodwin, of the Sedalia *Bazoo*, addressed the convention on "Pioneer Bee-Keeping," and it was decided to furnish Mr. Goodwin with the membership list of the association.

THIRD DAY—MORNING SESSION.

After reading several letters addressed to the Secretary and Treasurer, Mr. W. S. Dorn Blaser read an essay on the "Apicultural Exhibit at the World's Fair," which was discussed and referred to the Executive Committee.

Wm. F. Clarke, of Canada, had sent an essay entitled, "Apicultural Literature, its Influence and Effects."

This essay and its subject were discussed at length, and decided that apicultural literature is essential to successful bee-keeping, and its influence extensive for good or ill.

A motion prevailed that future conventions of the association be held three days instead of two. Also, that a part of the second day of conventions be set apart for a school for beginners, said school to have preference over all other business on that day.

Next, Hon. J. M. Hambaugh, of Spring, Ills., member of the Illinois Legislature, read an essay on "A State Appropriation for the Collection of Statistics and Dissemination of Information on Apiculture." The subject was discussed and deferred until the fall meeting for further consideration. Also the question of an Experiment Station was discussed at some length, and deferred for further consideration.

AFTERNOON SESSION.

The subject of "Hindrances to Bee-Culture" was discussed. Points such as the following were offered and discussed: Foul brood; bee paralysis; lack of attention; poor seasons; lack of knowledge; low prices of honey, etc.

The committee on resolutions presented the following report, which was unanimously adopted, and the committee relieved, with thanks:

Your Committee on Resolutions begs leave to make the following report:

Resolved, That we tender our sincere thanks to the proprietor and management of the Minnewawa Hotel at Pertle Springs, for their kind and courteous attention and accommodations to us while with them; and we find that the valuble reputation of the "Springs" as a summer and health resort is not in the least exaggerated.

Resolved, That we tender our thanks to the citizens of Warrensburg and vicinity, and the press, for the interest manifested and courtesies extended to our convention while in session.

Resolved, That we tender our thanks to Col. J. West Goodwin, editor of the Sedalia *Bazoo*, for his presence and well-worded address before the convention.

Resolved, That we extend our thanks and gratitude to the Missouri State Board of Agriculture for their kind consideration in publishing our annual report of 1890 and 1891, and for binding the same in separate form.

C. C. CLEMONS.
J. S. ATKINS.
J. H. JONES.
Committee.

The convention then adjourned.

[The foregoing report is condensed from the *Progressive Bee-Keeper*, which published it in full, including all the essays, some of which we hope soon to be able to give to our readers.—EDS.]

Wax-Moth—Introducing Queens, Etc.

BY "MALTA."

I find that when top-bars are "saw-cut" right through, the moth finds a first-rate nest in the upper side of the cut. She just eats away some of the wax, and even nibbles the wood, and then when the egg is hatched, the worm goes on right down into the septum of the comb. The bees cannot get at this part, owing to the quilt fitting close down. I put a stop to it by not letting the wax come up to the level of the upper side, and then filling up with putty; or else by using frames not cut right through—only grooved on the under side.

THE INTRODUCTION OF QUEENS.

I found the simplest plan of introducing queens to be as follows:

My hives all had a back door, closed when not required. When a new queen was required, the nucleus hive in which she was located was brought up and put with its door as close to the back door as possible, and facing the same way.

When they had become accustomed to the change, and were flying all right, a space at the back of the queenless hive was partitioned off by means of a tightly-fitting division-board made of perforated zinc (not excluder zinc), and the frames from the nucleus with the bees and new queen put into this space, and the back door opened, and a day or two after the zinc partition was taken away, frames closed up, etc.

The scent had become the same, and I never had a case of fighting or killing the queen; and with hives having fertile workers, this was the only plan to insure success. I suffered a good deal with certain races, from these pests—I suppose, from bad management.

FEEDING DRY SUGAR.

Dry-sugar feeding is never mentioned. It is clean, wholesome, and no trouble. It does not induce robbing, and is most useful to tide over a sudden bad time.

Panama.

Queens Mating—Bees Stealing Eggs.

R. I. CROMLEY.

On page 737 of the BEE JOURNAL for June 2, 1892, I noticed an article written by Mr. W. J. Davis, about young queens mating with drones five miles distant from his apiary. I think that drones have a certain place to congregate, and their noise attracts virgin queens that may be on the wing at the time, and they go to these places and are fertilized. I have discovered two places that they congregate in great numbers, about ¼ mile from my apiary. Go there when I will, when the drones are flying, and I can find the air full of them, over a space of two acres. If I stand between my apiary and the place of congregating, I can see the drones coming and going continually.

STEALING EGGS TO REAR QUEENS.

I also noticed an article written by Mr. Geo. E. Fellows, on page 741 of the same number of the BEE JOURNAL, about bees stealing eggs from another colony, for the purpose of rearing a queen, as they were queenless. I do not think such is the case. I had a case similar to his, but I do not think the larva was stolen.

Last August I received an Italian queen from Italy; she was 16 days on the way, and the accompanying bees were all dead but three or four. I introduced her successfully into a queenless colony; there were neither eggs nor larvæ in the hive. I looked at her every few days to see if she was laying, and kept this up for two weeks, but I could never find any eggs.

I did not look at her again for a week, and, to my surprise, I could not find her, but found a very nice queen-cell nicely sealed, which hatched eight days later. There is no doubt but this cell was built for the queen, and the only egg she laid was in this cell.

This looks as though a queen had instinct enough to know that a colony cannot prosper without a queen.

About 70 per cent. of the bees in this neighborhood died during the past winter. White clover is very plentiful in this section this season, but secretes no nectar for the bees, as they do not work on it at all.

Muncy Station, Pa., July 15, 1892.

Hiving Swarms, Alsike Clover, Etc.

C. H. DIBBERN.

The new modified swarmer is working nicely, and we are getting very fair-sized swarms. The beauty about the thing is, that you do not have to be constantly on the watch for swarms. The fact is, our bees are not watched at all. Every few days we look over the hives and see if any have swarmed. If so, we change the surplus cases to the new hives, and give them bees enough to make them strong working colonies.

We are using hives full of combs to hive the swarms on, and place them right on the hives, that we expect to swarm. We believe that by using hives containing combs, we get much larger swarms by the swarmer than where foundation or empty hives are used. Then just now we are very anxious to use up all the combs we have on hand, as the bees can care for them much better than we can.

We have heretofore disputed a statement made by Mr. Henry Alley, of Massachusetts, that when two or more swarms issued at about the same time, each would go back to its own location when the self-hiver was used. Our experience seemed to justify us in making

the contradiction, but we had not had many cases of the kind, and our swarmers were more or less imperfect. In justice to Mr. Alley, we have to acknowledge that we were mistaken in our conclusions.

On June 28 we had five swarms in the air at once, and although they clustered for a short time in a huge bunch, they commenced to return each to their own hive, to our entire surprise. We have had several cases since that, and now must own up that where no queen is allowed to get out, the bees will not all go to one hive. This is a point that will make the self-hiver much more valuable than it would otherwise be, and we are only too glad to make the correction.

In riding over the country during the last few weeks we noticed quite a good deal of Alsike clover. Even along the roadside there is quite a sprinkling, which clearly indicates that it is a plant that has come to stay. Melilot is now at home with us, and now Alsike is another welcome addition to our honey-producing flora.—*Western Plowman.*

Rock Island Co., Ills.

Convention Notices.

COLORADO.—The Colorado State Bee-Keepers' Association will hold their "Honey-Day" in Longmont, Colo., on Sept. 28th, 1892.
Littleton, Colo. H. KNIGHT, Sec.

ILLINOIS.—The Rock River Bee-Keepers' Association will hold its next semi-annual meeting at the Whiteside Hotel, in Morrison, Ills., on Thursday, Aug. 4, 1892.
Morrison, Ills. J. M. BURTCH, Sec.

MINNESOTA.—The next meeting of the Southeast Miunesota and the West Wisconsin Bee-Keepers' Association will be held in Masonic Hall, at La Crescent, Minn., on July 27, 1892. JOHN TURNBULL, Sec.
La Crescent, Minn.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. BENJ. E. RICE, Sec.

The Globe Bee-Veil, which we offer on the third page of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, with $3.00.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Aug. 17.—Wabash Valley, at Vincennes, Ind.
Frank Vawter, Sec., Vincennes, Ind.

Aug. 27.—Haldimand, at S. Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.

Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.
Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.
Benj. E. Rice, Sec., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association
PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich.

National Bee-Keepers' Union.
PRESIDENT—James Heddon..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Hot, Hotter, Hottest!

The weather is hot; for six days in succession it was above 90° in the shade. It is 90° in the shade at this moment. In 1891 the temperature reached 90° but once. It has been there a dozen times so far this year.

HENRY ALLEY.
Wenham, Mass., July 22, 1892.

[We can sympathize with Bro. Alley, for at the time he was "enjoying" 90° in the shade, we were trying to "enjoy" 95°. Oh, but wasn't it hot? 'Tis said that "Uncle Jerry Rusk came West to hear the corn grow" during those hot days! During the hot spell here in Chicago, hundreds of people died, or were overcome by the extreme heat. One hundred horses died in one day from

the effects of the heat. But now (July 29) the cool wave has reached us, and also a splendid rain, so we are all right again—and ready for more renewals of subscriptions and new names. Send them along, and we will take care of them, though it should reach 100° in the shade !—EDS.]

Bees in Splendid Condition.

I have 82 colonies of Italian bees, in 8-frame chaff hives, which are in splendid condition. I will obtain from 1,200 to 1,500 pounds of comb honey, for which I am getting 15 cents a pound.

W. M. RAGON.

Macomb, Ills., July 25, 1892.

Piping and Quahking of Queens.

On page 86, I am made to say that piping and quahking of queens would be heard *two* days after the issuing of a prime swarm. At any rate, it should be *eight* days.

I want to say to Mr. Andre (see page 86) that my young queens are not so sisterly as his, for they just seem to enjoy killing one another.

C. C. MILLER.

Marengo, Ills., July 23, 1892.

A Novel and Handy Drone-Trap.

Put two chickens into a coop, with plenty of water, but no food except drones, pulling off their legs so they cannot crawl away. Feed the chickens 3 or 4 days, then turn them into the apiary, and see them walk up to the hives and pick off hundreds of drones. Hens are the best, as they have no combs on their heads to be stung by the bees. GEO. POINDEXTER.

Kenney, Ills., July 25, 1892.

The "Silver Lining" is Here, Etc.

The "silver lining" to the cloud is here at last. The good honey season for this year, which I predicted, is here. Basswood is not here yet, but from 18 colonies I have extracted about 900 pounds, and doubled them, so that I am in good shape for basswood when it comes. The honey, so far, is mostly from milk-weed. In four days this week several colonies stored from 20 to 35 pounds each. C. A. MONTAGUE.

Archie, Mich., July 22, 1892.

Encouraging Prospect for Fall Crop.

The honey crop in this (Calhoun) county has not been a very good one so far. White clover yielded well, but the bees could not work on it more than about three days in a week, and now some more of the honey-dew is coming in, but not so much as last year. The prospect for a fall crop is encouraging, yet the late high waters have killed some of the smart-weed and Spanish-needle along the river-bottoms, making it not quite as good as it would have been. FRANK X. ARNOLD.

Deer Plain, Ills., July 27, 1892.

Swarming Pretty Lively.

Last autumn I had 22 colonies of bees, and they all wintered excepting one. I have now 40 colonies, and expect to have more by fall. This morning 3 colonies swarmed at once, 2 swarms settling on the same twig, and the third on the limb of a large tree. I put the first two into one hive, and as soon as they were all in the hive, the third swarm flew off from the limb where they had settled, and went into the same hive. ALBERT FAY.

New Richmond, Wis., July 20, 1892.

Can Bees Hear?—Rolling in Honey.

Yes, they can, whether they have *ears* or not. I will illustrate: A colony has just swarmed. I shake the bees down on a canvas, two yards from the front of the new hive. They spread out like so much molasses, and in a few moments one reaches the hive entrance, tilts herself forward, and sets up the "home call." Instantly the colony head for her, and run like a flock of sheep, straight for that call.

Again: I hived a swarm to-day. They alighted on the north side of a thick strip of currant and plum bushes, on a maple, 30 feet high. I cut off the branch, shook off a quart of bees, and they went up into the air, and I carried the branch and bees to the other side of the bushes, shook them on the canvas, and of course a great buzzing took place. Over the bushes the lost bees came with a rush, and into the pile of bees. Yes, they can hear.

The bees are just rolling in the honey now, and I look for a good season.

C. F. GREENING.

Grand Meadow, Minn., July 27, 1892.

Read our great offer on page 165.

COMBED AND EXTRACTED.

Salt for Bees.

On account of the avidity with which bees take salt, I had supposed it as necessary to salt them as to salt my horses, hogs and cattle. If one does not keep a salt trough for the bees they are apt to swarm about his stock and well troughs, and many are drowned; but so long as salt water is given to them, they do not go or bother anywhere else. But aside from this question of mere convenience, I have found it safest to be guided by nature; and since bees show such a love for salt, it would seem that it is necessary for them, and hence should be our practice to give it.

Where there are streams or ponds convenient, bees, especially if not salted, will resort to these for water; but even then there are certain spots that seem to yield mineral or brackish water where they go to suck. This shows their need of something more than ordinarily pure water, and since they leave all other watering places for a salty one, we can fairly conclude that it is best to give it. —WM. CAMM, in *Bee-Keepers' Guide.*

Another Way to Preserve Combs.

Many bee-keepers like myself have not a suitable cellar to hang up our empty combs in. The way I care for them is as follows:

I use the Bristol hive. I put a sheet of tarred paper, one inch larger than the top or bottom of the brood-box, on floor of the honey-house; set a brood-box on it, and fill it with combs, and then another sheet of paper, and then a brood-box of combs, and so on, and on the upper brood-box put a honey-board to hold the paper down tight to the brood-box.

The above is for combs I know are free from moths, or have been exposed to a temperature of zero—combs, as I bring them in from the yard, that are liable to have some moth-eggs in. I put only 8 combs in a brood-box 1½ inches apart, and then look them over in about a week; and if I find any moths in the combs, I put them into some of the hives for the bees to care for, and clean them out. Should a moth chance to hatch in any of the combs between the tarred paper, it cannot get out.

I have combs I have thus taken care of for three years that I have not looked at except the first year, to see that the tarred paper would preserve them, packed in brood-boxes, from mice, moths, bugs, dust, and ants, until I want to use them.—H. B. ISHAM, in *Gleanings.*

Bees Carrying in Honey and Pollen.

Having moved two of my hives during the winter to a wooden bulding close to my house, I can watch the bees through a glass coming in and going out, and though I am not quite certain, I think the old bees mostly bring in the honey, and the young ones the pollen. It was certainly so during the colder weather we have had, but now many of the younger bees are beginning to be middle-aged, and the difference is not so marked.

A young bee has a good deal of down on its body, and may be called a "brown bee." The old bees have less down, and when full of honey, the body is swollen, black and bright, and looks almost as if honey would spurt out if the bee were pricked with a pin.

A bee, loaded with honey, trails its body along the floor, while an empty bee, or one bringing in pollen only, scarcely touches the floor, and even only with the tip of its tail. I feel very sure that an old black bee will not be seen bringing in pollen. I send you a rough drawing, showing the difference. We all know that a bee, full of honey, does not sting in the same way as an empty bee, and it is possible the change of shape may render it more difficult to put out the sting.

[Our own observations incline us to believe that young bees also bring in honey, and that both young and old bees frequently bring in honey and pollen at the same time. We agree with our correspondent as to the reason bees laden with honey do not sting.—EDS.]—*British Bee Journal.*

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 165, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

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TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

WANTED—Everybody to send me 10 cents in exchange for my little book, "The A B C of Ferret Culture." It tells all about the care and management of this little animal.
25Atf N. A. KNAPP, Rochester, Lorain Co., O.

WANTED.—Those having small sums of money "saved up" can find perfectly SAFE investments, at 7 per cent. interest, for long or short time, by writing to
THOS. G. NEWMAN,
199 Randolph-st., Chicago. Ills.

WANTED TO EXCHANGE—My new price-list of Italian Bees, White and Brown Leghorn Chickens, White and Brown Ferrets, and Scotch Collie Pups—for your name and address on a postal card. N. A. KNAPP,
25Atf Rochester, Lorain Co., Ohio.

HONEY AND BEESWAX MARKET.

CHICAGO, July 30—No choice comb on the market. Some inquiries for new stock, with none to offer. A good article would bring 15 @16c. Extracted is very scarce, and plenty of inquiry for same; it would bring 7@8c. Beeswax—firm at 26@27c.; good demand.
J. A. LAMON, 44-46 S. Water St.

CHICAGO, July 30. — Comb honey is dull and no demand. Selling finest grade white at 15c. With new crop prices will rule firmer. Extracted is scarce and in good demand at 7@7½c. Beeswax, selling at 26c.
S. T. FISH & CO., 189 S. Water St.

CHICAGO, July 30.—Selling slowly, trade being in strawberries and other small fruit. No fine comb honey on the market—it would bring 15@16c. Extracted, 6, 7 and 8c., according to quality and kind. Beeswax, 27c.
R. A. BURNETT, 161 S. Water St.

NEW YORK, July 30.—Extracted in good demand and fair supply. We quote: Southern per gallon, 65@75c.; orange bloom, 7@7½c. ℔ lb. Beeswax, 26@28c.
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., July 30.—The old crop of comb honey is all cleaned up. First shipment of new comb honey this week, which we quote at 16c. for No. 1 1-lbs.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, July 30.— Demand is good for extracted at 5@8c. Ddemand is slow for comb honey. at 12@15c. for best white.
Beeswax is in slow demand, at 23@25c. for good to choice yellow.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, July 30.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6@7c.; buckwheat. 5@5½c.; Southern, 65@75c per gal.; Calif., 6½@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c more per lb. for extra select.
CHAS. ISRAEL & BROS., 110 Hudson St.

ALBANY, N. Y., July 30 — Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.
H. R. WRIGHT, 326-328 Broadway.

DETROIT, July 30.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.
M. H. HUNT, Bell Branch, Mich.

MILWAUKEE, July 30—Demand very moderate, supply average of all grades but common quality. Best 1-lbs. 15@16c; common, 12@13c. Extracted, white, in barrels, 7c.; in kegs, 7½c; in pails, 7½@8c. Beeswax—demand fair, supply small. Price, 23@28c.
A. V. BISHOP, 142 W. Water St.

NEW YORK, July 30.—Demand is light, and supply large, except buckwheat comb. We quote: Fancy white comb, 12@14c; buckwheat, 9@11c. Extracted—Clover and basswood in good demand at 6½@7c; buckwheat ind emand at 5@6c. Beeswax in fair demand at 26@28c.
F. I. SAGE & SON, 183 Reade St.

SAN FRANCISCO, July 30.—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax—24@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street.

BOSTON, July 30—Demand is light. White 1-lbs., 13@15c. No 2-lbs. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.
BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS, Minn., July 30—Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.
STEWART & ELLIOTT.

KANSAS CITY, Mo., July 30.—Old honey is cleaned up, both extracted and comb. New crop will be in about July 10, here.
HAMBLIN & BEARSS, 514 Walnut St.

NEW YORK, July 30.— Demand moderate, and supply reduced, with no more glassed 1-℔ nor paper cartons, 1-℔. We quote: Comb, 1-℔, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 120 Pearl St.

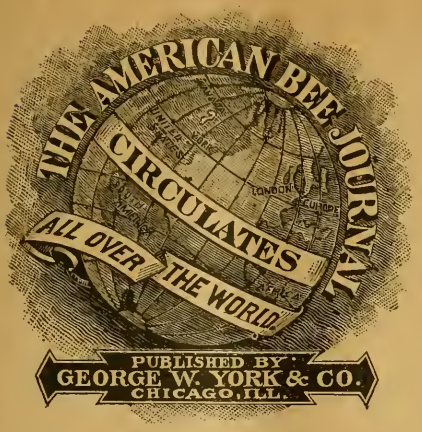
Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

We Club the AMERICAN BEE JOURNAL and the monthly "Illustrated Home Journal" one year for $1.35; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for $2.10.

The Honey-Bee; giving Its Natural History, Anatomy and Physiology. By T. W. Cowan, editor of the *British Bee Journal*, 72 figures, and 136 illustrations. $1.00. For sale at this office.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

The Busy Bees, and How to Manage Them, by W. S. Pouder. Price 10 cents. For sale at this office.



ONE DOLLAR PER YEAR.

Club Rates,—Two copies, **$1.80**; 3 copies, **$2.50**; 4 copies, **$3.20**; 5 copies, **$3.75**. Mailed to any addresses.

THOMAS G. NEWMAN, } EDITORS.
GEORGE W. YORK, }

Vol. XXX. Aug. 11, 1892. No. 7.

EDITORIAL BUZZINGS.

Man Wants but little here below—
He is not hard to please;
But woman—bless her little heart—
Wants everything she sees.

Iowa and Minnesota, if we may judge from reports coming in, are having the largest honey crop known for years. This certainly is very encouraging, and bee-keepers, at least in those States, will have much reason to be grateful. The following, from Mr. A. P. Shigley, of Mankato, Minn., shows a pretty big piece of "silver lining" that had been obscured so long:

There never was, to all appearances, a better honey season here than this. I have lived here for thirty odd years, and never saw anything more promising than at present. I do not know my yield per colony, but I would estimate it as over 100 pounds, spring count.

A. P. SHIGLEY.

The Honey Crop for 1892.—On page 135 we called attention to an effort being made by Bro. Root in *Gleanings*, to find out something about the honey season and prospects for 1892, by postal card reports from bee-keepers all over the country. In response to that request, a number of replies were received, and here is what is said of them in *Gleanings* for Aug. 1:

The replies show that it is a little early yet to show what the average per colony will be for the season.

On the whole, the showing is no worse than last season, and certainly promises to be a little better. Bee-keepers this season have been thrown out of all their calculations. The season has been fully a month later than usual, and clover has *followed* basswood in many localities. The probabilities are, so far as we can ascertain from reports, that clover will be yielding nectar for a considerable period this year.

In *our* locality we have had a steady flow from basswood for just about a month, and this is indeed remarkable. It is also evident that bees are getting considerable honey from white clover; and sweet clover never yielded more honey than this year; in fact, we have had the best and heaviest honey-flow in many years. Some of our hives have five stories, all full of bees, honey, and brood. We have been contemplating putting on the sixth story, and hope to be able to do so yet. These five-story colonies were all run for extracted honey, and the bees were made to draw out frames of foundation in every case. If we had given them empty combs perhaps we should have been more astonished than ever at the amount of honey. It has been over ten years since we were able to put on more than the second story to any colony.

When the Next Meeting of the North American Bee-Keepers' Association will be held, will very likely soon be decided, and there is little doubt now that it will be held later than September. Secretary Hutchinson has received some letters from those interested in the event, the following being from President Eugene Secor, of Forest City, Iowa, dated July 30, which gives his views of the matter, and also something

about the honey season in his locality this year:

FRIEND HUTCHINSON:—When I suggested to you some time ago that it would be a good thing to try and have the North American meet at the time of the G. A. R. Encampment, I did not think that the latter would occur so early in the season, and I therefore wish to take back what I then said, because I think this is too early, if the Encampment meets some time in September. If there is any association going to meet in Washington any time from December to February, I would prefer that to meeting in September.

I read Mr. Benton's letter, also noticed your remarks in the *Review*. If the brethren feel as you have suggested about it, which I have no doubt the majority do, I think it would be better to put off our meeting for the present, and try to learn of some interesting occasion in the winter time at Washington, of which we can take advantage.

I am getting some honey this year. The season has been the best for several years past. Basswood is just about going out of bloom—did not yield as much this year as some seasons. White clover has been much better, and with the abundant rains we have had, probably the fall crop will be better than last year. Yours Very Truly,

EUGENE SECOR.

Mr. Hutchinson also received a letter from Mr. Frank Benton, who lives at Washington, and is watching things at that end of the line. Mr. B. wrote as follows on July 28, regarding the matter of time-limit of the G. A. R. Encampment tickets, etc.:

Neither at the railway ticket offices here, nor at the Grand Army headquarters, can they tell me anything as to the limits of the time during which tickets issued at reduced rates upon the occasion of the Grand Army Reunion will be available to come to Washington. At one office they informed me that such tickets will be good returning until Oct. 10. Of course no such tickets will be handled here, hence no especial instructions have been issued to agents at this point.

Hotel rates will surely be "stiff" *during* the Reunion, but at any other time I think a number of very nice family hotels—quiet places, well or even elegantly fitted up, and with tables well supplied, having for their regular price about $2.00 per day—will give a special figure to the members of the North American, if quite a number will combine and go to one place.

Yours Truly,

FRANK BENTON.

P. S.– Since writing the above, I have learned that tickets are available coming *to* Washington up to the 20th of September only.

LATER.—Since the above was put in type, we have received the following letter from Secretary Hutchinson, which seems to indicate that the convention will *not* be held in September:

FRIEND YORK:—Enclosed you will find a letter which I have just received from Ernest Root. You will see that there is almost a unanimous feeling that during the meeting of the G. A. R. is *not* the time to hold the convention. Although I shall write to the other members today for their permission to announce that the convention will *not* be held during the Encampment, there is no question as to what the decision will be.

W. Z. HUTCHINSON.

The letter from Mr. Ernest R. Root, mentioned by Bro. Hutchinson, reads thus:

FRIEND HUTCHINSON:—Mr. Benton is correct, and I am fully in accord with your views, that we must have reduced rates. If we can have the convention held in December, when there will be some sort of doings in Washington, enough so as to secure half-fare, or at least one and one-third fare, *that* will be the time to hold the convention. The G. A. R. day would be a bad time, I am sure. If there is no such time in December, then October or November would not be bad.

As you are Secretary, how would it do to write to Mr. Benton, asking him to ascertain the date of the various conventions and associations that will meet between now and next January, and what sort of a reduced railroad rate will be likely to be secured at those various conventions? Mr. Benton is on the field, and can do the work thoroughly and well. Respectfully,

ERNEST R. ROOT.

Read S. F. & I. Trego's Advertisement.

Some Queen Questions.—Mr. D. Lindbeck, of Bishop Hill, Ills., on July 25, 1892, sent in the following questions about queens:

1. Is there any way to distinguish a queen that is started from a four-days'-old larvæ, from one started from 36 hours to two or three days?
2. Are such queens (from four-days'-old larvæ) as good as others?
3. What is the best and safest way to unite a nucleus having a laying queen, with a full colony that is queenless? I have tried, and had the queen killed.
4. I also have one colony that has killed four queens. What can be the cause? D. LINDBECK.

Mr. G. M. Doolittle, who has had years of experience with queens, answers the above questions thus:

1. The older the larva from which a queen is started, the smaller the queen, and the more nearly she resembles a worker. I have seen queens which looked very little different from workers. Queens started from larvæ 24 to 48 hours old, are as fully developed as any, and unless the larva is of greater age, no difference can be detected in the looks of the queen, from one that was reared as a queen from the egg.

2. Such queens are slow to become fertile, but if they so become they will lay nearly, if not quite, as well as the best of queens, for two or three months, when, as a rule, they are superseded, or die of old age.

3. Place the nucleus on the stand of the full colony, then shake the bees from their combs, as they are taken one by one from the full colony, shaking these bees from two to five feet away from the hive, allowing them to fly or crawl this distance into the nucleus, placing the combs as fast as the bees are shaken off into the nucleus. The nucleus being established, and the full colony badly disorganized by this shaking off of the bees, causes the proud, full colony to "take off its hat" and "eat humble pie" as it enters the nucleus.

4. Laying workers, without doubt. Get rid of them as the books tell, when they will accept a queen.

Borodino, N. Y. G. M. DOOLITTLE.

Growing Basswood Trees for the honey they yield, and for shade, is written about in an interesting article by Dr. G. L. Tinker, on page 205 of this number of the BEE JOURNAL.

It is high time that bee-keepers all over the regions where once flourished the basswood so abundantly, bestir themselves about this matter, and act upon the advice given by Dr. Tinker,

Read further what Bro. Root writes about basswood as a honey-plant, in *Gleanings* for July 15:

It is now something like twelve years since we planted a row of basswood trees on the north side of our ranch; and we have been watching these trees season after season, to learn what we could about the growth of them, the secretion of honey, etc. During this present year of 1892, when my mind was occupied a good deal on other matters, my attention has been called to the basswoods by the exceedingly profuse bloom and loud roar that greeted my eyes and ears every morning about sunrise, or a little after. It was not the ears and eyes alone that were delighted, either, for the perfume of ten thousand opening blossoms was quite a prominent part of the enjoyment.

Every tree that was large enough has been for several days back just bending under its load of bloom, and it seems as if a part of the load were made of nectar; and, finally, when we almost began to despair of any honey-flow at all, even *this* year, the gates, as it would seem, have been opened, and we have had a flow of honey that many think exceeds anything during the past ten years.

Just as we go to press, reports begin to come in from every direction, about the honey-flow; and my enthusiasm in growing basswoods for honey as well as for timber has again awakened. There is not a handsomer shade tree in the world, in my opinion; and I am quite certain that there is no other plant that bears honey, that *begins* to furnish anything like the quantity. If I could only make the pesky little seeds germinate and grow as we do cabbage plants, I should just delight in furnishing the whole wide world with millions of basswood trees, at an exceedingly low figure.

Mr. R. J. Hood, of Sparta, Ills., called on us a few days ago. Mr. Hood is a young apiarist, and takes much interest in the pursuit. It is a pleasure to meet those growing up to take the vacant places in apiarian circles.

The St. Joseph Fair Association which gives its first annual Exhibition and Fair at St. Joseph, Mo., on Sept. 13 to 17, inclusive, offers $50,000 in premiums. Rev. E. T. Abbott, of St. Joseph, is the Superintendent of the apiarian department, and the very liberal premium list is as follows:

Best colony of Italian bees	$10	$ 5
Best colony of Carniolan bees	10	5
Best display of imported queens on single combs in observatory hives	10	5
Best display of queens reared by exhibitor, with progeny on single combs, in observatory hives	10	5
Best display of the general conduct and habits of a colony of bees in an observatory hive without manipulation	10	5
Best and largest display of honey in comb not less than 100 pounds	20	10
Best and most attractive display of extracted honey, not less than 100 pounds.	20	10
Best display of beeswax and comb foundation	10	5
Best display of honey-producing plants, including stalks, flowers and seeds, all labeled with name	5	3
Best comb foundation machine, to be operated on the ground	10	5
Best honey extractor	3	2
Best wax extractor	2	1
Best bee-smoker	2	
Best crate of 500 sections, open to manufacturers only	5	2.50
Best foundation fastener	2	1
Best section-press	5	2.50
Best honey-knife	2	1
Best bee-feeder	Diploma.	
Best queen-cage	Diploma.	
Best drone-trap	Diploma.	
Best display of apicultural literature	10	5
Best all-purpose hive	10	5
Best and most complete general display of apicultural implements	10	5
Finest and best crate of comb honey, not less than 20 pounds	10	5
Best and finest 20 pounds of extracted honey	10	5

The "Rules" governing the exhibit in this department are these:

No premiums will be allowed on articles not in place by noon of the second day, and properly receipted for by the Superintendent.

All honey must be new, and all comb honey must be crated in marketable shape, and the honey in each crate must be of uniform grade and color.

No premium will be allowed on any article not possessing real merit.

Bees will be permitted to fly, but the owner must be responsible for any damage they may cause.

Parties desiring space should notify the Superintendent early.

This department is open to the world.

Not a Queenless Indication.—Mr. James Cormac, of Des Moines, Iowa, asks the following question:

Is it an indication that a colony is queenless, not finding eggs or larvæ in the brood-combs at this season? This matter I do not remember of reading about. I cannot find queens without brushing off the bees.

JAMES CORMAC.

Mrs. Jennie Atchley replies to the foregoing thus:

No, it is not always a sure sign of queenlessness by seeing no eggs or larvæ at this season of the year. They may have a queen that is an "invalid," as the boys here call it, or so deficient that she will not lay at all. Give them a frame of unsealed larvæ and eggs from another hive, and if they do not start queen-cells in three or four days, you may be sure they have some kind of a queen; and if they do start queen-cells, you may know they are queenless.

Floyd, Tex. JENNIE ATCHLEY.

Mr. H. C. Farnum, of Transit Bridge, N. Y., and Miss Jessie B. Davis, of Aristotle, N. Y., were married on April 12, 1892. Mr. F. is a progressive apiarist, and the BEE JOURNAL wishes them a long and happy life, made "sweeter than honey or the honey-comb."

A Bee-Keepers' Convention will be held on Saturday, Aug. 27, 1892, at F. M. Green's Grove, at Whiting, Kans. All bee-keepers are invited.

Two Sides on the Farm.

MAY MAPLE.

Lice on the chickens, and bugs on the taters,
Flies and mosquitoes to pester us all;
Weeds in the dooryard, and weeds in the garden,
All growing rank where the sun-showers fall.

Bees hanging up in the trees in great clusters,
Waiting for some one to put them in hives;
Fruit to be gathered, and children to care for—
Pity, oh! pity the poor farmers' wives.

* * * *

Sweet new potatoes, and tender young chicks,
Bread, butter and honey, with milk new and sweet;
Peas, lettuce and beans—all the wealth of the garden,
With no warmed-over, stale city dinners to eat.

Cribs full of grain—Nature's gold, coined by labor,
Child fingers to draw forth the harmony sweet,
Without which life's music is quite half unuttered,
Oh, pity them not, for their joy is complete.
—Selected.

Expressions of Good-Will continue to come to us, for which we feel truly grateful. We are going to try to merit them, though we fear it will be a rather difficult thing to do. The following paragraph is from the Nebraska *Bee-Keeper* for July:

The "old reliable" AMERICAN BEE JOURNAL, which has been so long and successful under the management of Mr. Newman, has changed proprietorship. Mr. Newman, on account of ill-health, has retired, and Mr. George W. York has taken his place. Mr. York has for some time held the position of assistant editor, and is well qualified to carry on the work.

We regret to lose Mr. Newman from the position, but if he must retire, we congratulate the patrons and bee-keeping fraternity, that so good a man has been found to take his place. May success attend the new management.

We especially value the kindly greetings of our co-workers in apicultural journalism, and shall ever hope that the pleasant feeling now existing among us may continue uninterrupted indefinitely.

The *American Farmer* for July had this to say concerning the change of management of the AMERICAN BEE JOURNAL:

Owing to the continued ill-health of Mr. Thomas G. Newman, the editor and manager of the old-established and widely-known AMERICAN BEE JOURNAL, he has found it necessary to be relieved of the care and labor attendant upon the management of that JOURNAL, and has transferred his interests to Mr. George W. York, still continuing, however, to give editorial advice and counsel through the columns of the paper.

Mr. Newman has done much during his active career to stimulate an interest in the pursuit of bee-culture, and it is a matter of sincere regret to learn of his retirement from the active field. We wish for the new management the same degree of success that has heretofore attended the publication of the paper.

To Mr. W. C. Frazier, bee-editor of the Iowa *Homestead*, we extend our thanks for the following fraternal notice:

The AMERICAN BEE JOURNAL has changed hands. Thomas G. Newman, who has been editor for many years, has been compelled, by failing health, to dispose of the editorial management, which has been assumed by Mr. George W. York. Mr. York is a young man of thirty, who has been assistant editor for several years, and under his management we have no doubt it will continue to be the same prompt and reliable journal, ever ready to defend the rights of the bee-keepers against their various enemies.

To publish a 32-page journal each week, devoted entirely to bee-culture is a herculean task; if you do not think so, try getting out the copy for an issue or two. While we regret that the old management has been obliged to retire, we heartily welcome and wish abundant success to the new.

Largest Crop Ever Known, is what they say of the white clover crop in northwestern Iowa. The fields are just covered with white blossoms that yield the abundant harvest of sweetness. The corn crop is reported as a failure in that part of Iowa, and the farmers are plowing the corn-fields and sowing them to buckwheat. That will doubtless mean a large crop of buckwheat honey later on. From nearly everywhere the reports are that the prospects never were better for a grand yield of fall honey. "So may it be."

QUERIES AND REPLIES.

Queens Producing 3 or More Banded Bees

Query 831.—Do you not think that an Italian queen that produces worker-bees with three or more distinct yellow bands, is purely mated?—F.

Yes.—C. C. MILLER.

Yes.—EUGENE SECOR.

Yes, most assuredly.—J. M. HAMBAUGH.

Not always, or necessarily.—M. MAHIN.

Yes, if all her workers are thus marked.—J. P. H. BROWN.

If *all* her bees have three yellow bands, she is purely mated.—H. D. CUTTING.

I think it would be impossible to say for certain whether she is or not.—R. L. TAYLOR.

It is quite likely that she is purely mated, but this is not an absolute proof. —DADANT & SON.

Yes, if the workers are *all* three banded; yet they may, or may not be.—MRS. J. N. HEATER.

If *all* her worker-bees have three or more yellow bands, I should say she was purely mated.—A. B. MASON.

Yes, or so nearly so that it would take several generations to detect a mixture if there was any.—MRS. JENNIE ATCHLEY.

I am not a very good judge of the markings of the Italian bee. I have no "full-bloods," and I don't want them.—E. FRANCE.

Yes, to all intents and purposes. The American Italian was produced by selection, and the "survival of the fittest." —MRS. L. HARRISON.

That is the way it is generally stated, but if the Italian is only a thoroughbred or hybrid bee, the word "pure" or "purity" should find no place in our statements.—G. M. DOOLITTLE.

I understand the three yellow bands to be only one of the indications of pure Italian bees. There must be also mildness of temper, and a disposition to adhere well to the combs on handling.—G. L. TINKER.

I should think so, provided *every* worker bee had three yellow bands, and no more; although I am of the opinion that it might be possible that she might be impregnated by an impure male.—JAMES HEDDON.

Yes, most assuredly, if all the bees are thus marked, as stated in Query No. 830. In very rare cases they might do so, even though impurely mated. Just as a half-blood shorthorn and poll Angus might be black and hornless, and genuine Angus, to all appearance.—A. J. COOK.

The above is the only real visible test, and when I find a queen that invariably shows three or more yellow bands in her worker progeny, such progeny being "clever," I am sure she is purely mated. The same result, however, will follow if she mates with pure drones of the other yellow varieties, so the "cleverness" of the workers must be taken into consideration.—J. E. POND.

I cannot say. In common parlance, when a queen meets a male of her own race, she is "purely mated." I think it most nearly certain that I have bred queens so highly by selection and persistent care, that they would produce workers with three or more yellow bands—the male parent being a hybrid. I have had several colonies of bees in my yard when left to breed and swarm in the natural way, that have risen from hybrids to "three or more banded bees," and then in process of time graded down to hybrids again.—G. W. DEMAREE.

Uniform yellow bands on bees are (as theologians tell us) the "outward and visible sign" of inward purity; but such things are not invariably to be relied upon. Generally, three yellow bands upon all the worker-bees of a colony would indicate that the queen was purely mated. But if the workers were irascible, or not very industrious, it would be quite reasonable to doubt the purity of the queen's fertilization.—EDITORS.

The Globe Bee-Veil, which we offer on the third page of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, with $3.00.

When You Have any honey to sell, get some Honey Almanacs and scatter in your locality. They will sell it all in a very short time.

Youthful Bee-Keeper's Story

Here is a story that is told by that veteran beekeeper, Mr. I. A. Root, in Gleanings in Bee Culture. Quite a young boy in the neighborhood of San Jacinto, Cal., evinced a liking for bees. He read everything he could lay hold of on the subject; watched beemen; listened to their talk until he was ready to put his knowledge to some practical use. His father, however, objected to purchasing a colony, saying they would find plenty of stray swarms at the proper season; and so our friend watched and waited.

BRINGING HOME THE BEES IN HIS TROUSERS.

At length a swarm came one day when he was at work in the fields, quite a way from home. He threw sticks and dirt among the bees, as he had read about, in order to make them alight, and finally scooped water with his hat, from a puddle, threw it among them, and was at length rewarded by seeing them alight and cluster on a bush. What should he hive them in? If he went somewhere for a box he feared they would start off again before he returned. It was hot weather, so he took off his trousers, tied up the legs and hived the bees in them. They evidently considered this a very fair hive, for they stayed in the trousers while he trudged all the way home with them. His good mother saw him coming and helped him hive them in good shape.

By the way, boys, is there any truer or kinder friend to a lad of thirteen than his mother? After the bees were hived, then the mother looked after the boy. The weather was hot and the road dusty, and poor Willie's bare legs were covered with a mixture of perspiration, dust, and occasionally a bee sting. His enthusiasm, however, was enough to help him hold on to his prize, and now he has a rousing colony of bees in a movable comb hive, and bids fair to be, in due time, one of the shining lights. His name is Willie Guthridge, and here is a sketch of him, as he brought home his first swarm.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Basswood as a Honey-Plant.

DR. G. L. TINKER.

It is now July 15, and we have as yet not a single section of sealed honey, nor has any honey come into market, and the calls for it are numerous.

Up to July 1 the bees were nearly starving when the basswood opened, and yielded bountifully for two weeks. There are, however, but few trees left here in this county, and the same may be said of the whole State of Ohio, and the strangest thing is, that so many bee-keepers have sold what few trees they had to the sawyer, and thus have cut off an almost never-failing supply of nectar for the bees; and to this cause alone—the cutting down of our basswood timber—is due the frequent failure of the honey crop of late years.

In the years that have gone by, the farmers always had plenty of honey all over this State. At the present time I know of farmers who have hardly had a taste of honey for the last four years, but have had to feed to keep their bees alive. This is because of the failure of white clover, which is now the only source of a large crop of honey we have left; but it fails to produce a crop every other year, and sometimes for two or three years in succession, so that often the bees must be fed in the fall for winter.

Now, these are unpleasant facts to contemplate, that every farmer and bee-keeper well knows, and it is useless to blind our eyes to truth longer, but if the industry of bee-keeping is to prosper, there must be found a remedy, and it

must be applied soon; and that remedy is in planting the basswood, or, as it is known by the German people, the linden. The cause of the failure of the white clover this year has been the frequent heavy rain-falls for the past two months in this locality. Only day before yesterday we had a precipitation of at least four inches, amounting almost to a flood!

Ten years ago I dug up three little basswood trees, and brought them home in my buggy, and planted them on the rear end of my lot in this city. They are now about 8 inches in diameter, and not only make a most beautiful shade, but have bloomed heavily every year for the last five years; and every year I have noted carefully the amount of nectar secreted, and can truly say that there is no other plant or tree in the world that yields so abundantly of nectar as the basswood; neither is there a honey gathered from any other plant or tree that is superior to it in flavor, and the color is almost as clear as clover honey.

The secretion of nectar goes steadily on, night and day, and not as in many kinds of plants, a little while in the night and early part of the day. However, the calyx of the flowers of the basswood fill up during the night with nectar, so it can be plainly seen in the morning in the five cups of the calyx; and I have often watched the bees take up the nectar, and how quickly they filled their honey-sacs and were away to their hives. I know of no other flower upon which the bees can get their "fill" so quickly except the flowers of the tulip tree or whitewood, which yields a strong, dark-colored honey, unpalatable to many.

These facts prove conclusively that in this country, at least, there is nothing equal to or that can take the place of the basswood for honey, and I would therefore suggest that all of our bee-papers, as well as all farm periodicals that are interested in our pursuit, be frequently urged to recommend the planting of young basswood trees to farmers and bee-keepers.

There is not a farm in the country but there is plenty of room to plant hundreds of the trees. If there is no other suitable place, they can be planted along the roadside, and will soon give a beautiful shade, and add to the value and fine appearance of any farm many times their cost and the labor of planting. In cities and villages their planting should be encouraged for the fine shade they give, and the beauty of well-trimmed trees that is exceeded by no other trees that are planted merely for shade and ornament.

All trees planted in public places, or along roadsides, or other places where animals can get at them, should be protected by two boards 6 inches wide, and 6 or 7 feet long. A few cleats 7 inches long nailed to the edges will hold them in place.

WHEN TO PLANT BASSWOOD TREES.

The best time to plant the trees is in early spring, but they may also be successfully planted in the fall. They may be grown from the seed as follows:

Collect the seed as soon as ripe, and *before they get dried out* on the trees. Cover them up on the ground with leaves and brush, and as soon as the ground can be worked in the spring, gather them up and sow in drills. The trees grow rapidly, and will begin to bloom in about seven years from the seed. Trees five or six feet high, that may be obtained very cheaply from the nurserymen, will begin to bloom in four years.

New Philadelphia, Ohio.

[For editorial remarks on this subject, see page 201 of this issue.—EDS.]

The Mating of Queen-Bees.

MRS. JENNIE ATCHLEY.

I wish to relate a little circumstance that happened not long since.

I had quite a number of young queens to hatch a few weeks ago, and from among them I confined a lot in the hives for five days, and kept them in the house, feeding them well each night. They had two frames of brood and about one pound of bees each.

On the fifth day I took them to one of my mating yards, 3 miles distant, at about 4 o'clock in the evening. I put them down and opened the entrances as I went, and just as soon as I had all out of the wagon, I went back and adjusted the frames, and to my great surprise every queen had mated and returned. We saw one queen (whose wings were a little bad, but could fly) that came in very cautiously, and two or three drones followed her right to the entrance. She caught on a weed in front of the hive, and the drones did the same.

Now, it could not have been over 30 minutes from the time I took them out

of the wagon until I examined them, and I do not believe it was more than 20 minutes. Drones were flying thick from the drone hives, and I know these queens did not go any 4 miles—not any ½ mile—from the hive to mate, but they were mated right in that yard, not over 2 acres in it. You see, these queens being 5 days old, and having been fed regularly, were crazy to fly, and consequently flew the first chance they had.

Now, could we not confine queen as above, and select the time to turn them loose, while the drones were flying, and have them mated to just the drones we wish? I believe it is worth trying, as these are plain facts, and no theory about it.

Floyd, Texas, July 12, 1892.

Bee-Questions by a Beginner.

J. F. EGGERS.

I have read up on bee-culture for several years, both books and periodicals, but I have been in actual "beesness" only since early spring. I have 6 colonies at home, and bought out an apiary of 13 colonies a few days ago—all Italians, and hard at work.

I find the bee-literature a great help to me—in fact, I would not undertake to start with so many colonies, if I had not posted myself as to their management. Here everybody winters bees on the summer stands, or in sheds, where they stand the year around, and the bees seem to come out all right in the spring, generally. I have thought of putting up a shed nearly high enough to admit the hive with supers, and have the roof so that it can easily be removed to admit the sunshine on cool days, and allow one to handle the bees over the rear wall. In winter, leaves could be packed over and between the hives.

It would interest me, and probably others of your readers, to have the following questions answered in the BEE JOURNAL:

1. Is it advisable to put up a shed to shelter bees from wind an sun? If so, what is the best way to build such a shed?

2. How near may hives be placed without injury to the occupants?

3. Is it detrimental to the bees to open the hive and handle the frames frequently, say once a week?

4. Why do bees often clinch and tumble to the ground, or fly away, holding to each other? Is it the fighting of two bees, out of different hives?

Grand Island, Nebr., July 16, 1892.

[By request, Dr. C. C. Miller has answered the questions asked by Mr. Eggers, as follows:]

BUILDING SHEDS FOR BEES.

1. Very few bee-keepers now-a-days put up sheds for their bees. I like, as do many others, to have my hives in the shade of trees, more for the purpose of having it pleasant for the operator than for any benefit to the bees. In the absence of any shade trees, I am not sure that it would not be a good plan to have some kind of a shed to shade the bees, but it need be only the simplest kind of covering or roof, high enough not to be in the way of the operator, no side-walls whatever.

THE SPACE BETWEEN THE HIVES.

2. The occupants of the hives are not likely to receive any injury directly from each other if the hives are placed close together in a straight row, as they were commonly placed years ago. There may be some mixing of the bees by their entering wrong hives, but that does not seem to make any trouble. There may, however, be serious trouble whenever young queens fly on their bridal trips, for in that case if a queen enters a wrong hive it leaves queenless the hive she left.

To avoid any trouble of this sort, it is necessary to have the hives well apart, and it depends upon circumstances how far that should be. On a level plain, where there is not a tree, shrub or building in sight, I think it quite possible that there would be some mixing and loss of queens in an apiary of 100 colonies if the hives should be placed a rod apart. But on the same spot you might with perfect safety put three hives touching each other, in any possible position. Bees are not good at counting, and if a bee has nothing else to go by except to find a hive, which is the fifth from the end in the third row, it is likely to make a mistake. But if the apiary consists of only three hives, the bee does not need to count. It can easily find the one at the left, right or middle.

So it is a good plan to have the hives at least five or six feet apart, especially as it is more convenient for the operator to have plenty of room between them. At the same time, it is a very fortunate thing, in case it is desirable to economize room, that it is just as well to place the

hives in pairs, as to place them singly. Suppose a row of hives six feet apart. Now you may place another hive beside each hive in the row, having the pair of hives almost touching each other, and there will be no more danger of bees or queens entering wrong hives than if you had left them single. You see a bee will never make the mistake of taking the right hand hive for the left.

I have said that under certain circumstances there might be trouble in an apiary of a hundred colonies, if the hives were placed a rod apart. I will now say that the same hundred colonies might be piled up in a solid block three high, and yet be as safe as they were before a rod apart. You will easily imagine that in the present case they will not be in an open plain with no objects to help mark the localities of the respective hives, but just the reverse. Of course, no one would want to handle hives in such a pile.

But if, for any reason, it should be desirable to have the hives occupy as little room as possible, it would help matters to have trees, bushes, posts or other objects near to the hives. Room can also be gained by placing the hives in groups of four each—a plan that I have practiced for several years. Two hives are placed side by side with perhaps a space of two inches between them, facing east. Then another pair faces west, the two pairs standing back to back. One convenience in having hives stand thus in twos or fours is, that when working at a hive you can have the hive standing nearest to be used as a table on which to place the smoker or other tool.

The only objection against having hives in pairs is that in a very few instances when a hive has had all its brood taken away, and has no queen, the whole colony may make a stampede for the adjoining hive, which they can reach without flying. But I do not know that they would do this if they had either brood or queen.

HANDLING HIVES AND FRAMES.

3. Much is said now-a-days about "handling hives more and frames less," and while I certainly do not want to handle hives "more," I should like to handle frames "less." Some day I may know enough to handle frames less, but at present most of my hives are overhauled about once a week. I do not think it hurts them. Of course, if bees are busy at work in the field, they are hindered a little at their work, but I do not think it counts for much.

FIGHTING AMONG THE BEES.

4. I have seen two bees of the same colony fight, but except in the case of queens, it was under very abnormal circumstances, and you may set it down as a rule that when you see two workers clinched, they are fighting because one of them is trying to steal from the hive of the other.

Marengo, Ills. C. C. MILLER.

The Development of Bee-Keeping, Etc.

A. E. JAMESON.

The bee-industry in this locality has grown wonderfully in the last few years, and it is almost impossible to pass a farm-house without seeing a lawn dotted with a hive or two. Hive manufacturers and bee-papers have done much toward bringing the old cracker and soap boxes out of the weeds, to be replaced on the lawn with movable-frame hives, and convince people that *bees do pay*. Fields and pasture land are fast seeding down to white clover, which, with the linden trees on all streams, added to large orchards now growing and ranging in size from 5 to 160 acres (many of 20 and 25 acres), make the future prospects bright for bee-keepers.

Now, when self-hiving arrangements attain the acme point, the farmer bee-keeper will be in the height of his glory, as many swarms abscond, one man catching eight this season, and dozens going into houses, chimneys, etc. One neighbor now has 3 swarms in his dwelling, which he wishes to have taken out immediately. He says they are "big, fat bees," but are not Italians, as he has heard that Italians are gentle.

From my 30 colonies, spring count, I have had one swarm to leave me, and it (or one which I have good reasons to believe was it) came back next day, and is doing nicely. Honey is very plentiful. Fine comb honey is selling in the small towns at 12½ cents per pound, and owing to the abundant yield, it was stored fast, and is very fine. The apple crop here is light, although more than will be used for home consumption.

Weeping Water, Nebr., July 24, 1892.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 197.

Five-Banded Golden Italian Bees, Etc.

O. FITZALWYN WILKINS.

On page 381 of the AMERICAN BEE JOURNAL for March 17, 1882, is the following query:

"Who was the originator of that strain of Italians known as the 'five-banded golden Italians?'"

I presume no one has laid claim to being the originator, because I have not, as yet, seen any reply to my inquiry in any bee-paper which I take.

I have been "keeping bees" since 1866, and have nearly every year purchased an Italian queen from some one—more from a Massachusetts breeder than any other, because his queens were invariably as he represented them. I have not obtained any queens from that gentleman for several years, for the reason that I am badly afflicted with color-blindness, so far as bees are concerned, and cannot see perfectly anything that is not "*golden-to-the-tip.*"

However, I believe in "giving unto Cæsar the things that be Cæsar's," or, in other words, giving "honor to whom honor is due;" therefore, I will say just here, that three years since, I procured queens from several breeders, none of which produced progeny equal to that of the Massachusetts queen for gentleness and industry. In the month of June, 1890, her "children" stored in one hive 240 pounds of *extracted* honey, being 100 pounds more than either of the others, although I treated all impartially.

Of course, there are many who keep bees for profit, and have realized much larger returns than the above. I remember, "some twenty years ago," one case in which 600 pounds were extracted from one hive; at least it was so reported in the AMERICAN BEE JOURNAL, Vol. VII., No. 7, for January, 1872, page 164, on the middle of the second column. By the way, what has become of Gallup, "Novice," "Amateur," and a score more of the "old timers?"

Do you know I experience more real pleasure in looking over the first volumes of the AMERICAN BEE JOURNAL than in any other occupation except working among my *yellow* pets?

"Honor to whom honor is due," reminds me that I procured queens last year from four "five-banded breeders" who "satisfaction guaranteed;" but all of whose queens were not producers of even uniformly three-banded workers. The queens were from breeders in New York, Maryland, Illinois and Missouri, and I expected to obtain some very fine queens from them. Well, Missouri and Maryland furnished queens to fill the bill; New York's was very poor—she produced two and three banded bees for a short time, and departed this life after a ten weeks' sojourn in our grand Dominion of Canada! Like the "summer girls" generally, she was not ready for annexation!

The Illinois queen was very prolific of three-banded workers, and extremely dark drones. The workers had cloudy spots in the bands, also extremely vixenish tempers. I rejoiced "with an exceeding great joy" at her early admission to the halls of Valhalla this spring, where, if she be not sipping nectar from the skulls of her rivals, she is doubtless sharpening her death-dealing brand on the thorax of some vanquished enemy.

The other two queens—from Maryland and Missouri—each produced four and five banded workers, gentle as butterflies (almost), and as industrious as our own Canadian beavers.

The idea advanced in a New York bee-paper, would have, I think, a beneficial effect on those breeders who obtain money under false pretences, viz.: that each apiarian periodical throughout the continent should publish a "black-list" of all unscrupulous dealers in apiarian supplies.

International Bridge, Ont., July 4.

Swarming, The Season, Etc.

JOHN M. SEILER.

I had 9 colonies, spring count, mostly in box-hives, so I worked them for increase, and got it. One colony did not swarm, but the other 8 cast 14 natural swarms. I sold 2, and united the second swarms. One second swarm I united with a weak one that had comb built only on 6 of the 8 frames (I use the 8-frame Wisconsin hive); on June 20 I put a super on and they filled it, and on July 14 they cast a large swarm.

The first swarm I got on June 9, and they filled their hive with honey, and about 40 pounds in one-pound sections; I put a third super on, but not soon enough, as on July 27, four days after I put on the third super, it cast an 8½-pound swarm—that was 48 days after it was hived.

We had lots of rain during May and June, but for two weeks after July 4, bees worked extra fast on white clover. The past week has been very rainy, but it has cleared now, and bees are hard at work on both clover and buckwheat. Mine are the brown or black bees—some call them hybrids, but they are not as cross as some say the hybrids are.

I wish to ask concerning a colony of bees: I purchased a prime swarm in July 1890; in 1891 it cast 2 swarms, and this spring it was strong with bees, and plenty of honey, but it kept dwindling until about June 15, and since then it has gained some. Some time in June, after we had a wet, cool week, I noticed them carrying out the dried skins of larval bees; they were black, or nearly so. They did not swarm this year, but I have noticed the same about the other colonies that have swarmed, and the first swarm carried some out, too. One of my neighbor's saw the same on his bees. What causes it? The bees are all right, and work well.

Chanhassen, Minn., July 29, 1892.

[Doubtless the bees were starving, and destroyed the larvæ to save feeding them.—EDS.]

Extracted Honey and Increase.

FRANK X. ARNOLD.

I wish to tell how I get a crop of extarcted honey and increase both, where the spring crop is very short, and a good flow of honey is expected in the fall. This method is only good to practice when the colonies are strong, and one has plenty of spare combs.

First, put on all the combs they need, as soon as honey is coming in, but care should be taken not to put too many on at one time—just as fast as the bees need them. Towards the end of the honey-flow, each colony should have from 12 to 16 frames of brood, and bees enough to well fill a three-story eight-frame hive.

When the honey-flow is nearly over, extract them, but not all the honey, leave about 10 pounds of sealed honey; then divide them by taking nearly two-thirds of the brood and honey with adhering bees to form the new colony, and introduce a laying queen, leaving the old queen with the original colony.

The new colony now having the most brood and bees, some of the working bees will return to the old home, making that part of the division the strongest in bees, and the new colony having the most hatching brood for the next three weeks, will make them about equal in strength. This is the best method of the many I have practiced, that is, when the honey-flow is very short.

Why not divide them before the honey-flow, or let them swarm, and then after the harvest extract from both colonies, and get double the amount of honey from the 2 colonies as from the old one itself? There are many reasons for this. I have studied well the conditions of this locality, and know whereof I speak.

First, if a colony is divided before the honey-flow, the division will make them unfit for surplus honey.

Second, if they are left to swarm naturally, the amount of work they do during the preparation for swarming is almost nothing, as far as storing honey and comb-building is concerned; and after the swarm issues, it will not build much comb nor store any surplus honey.

Third, when they are divided after the main flow of honey, one has a good chance to rear first-class queens, and need not feed the nucleus during that time, which is another advantage. I prefer to rear queen-cells in a full colony, and, when ready to hatch, distribute them among the nuclei.

This question naturally arises: Does a colony that is the result of natural swarming, work more than one that does not? I believe they do not work much more, for this reason, viz.: When a colony prepares to swarm, the bees consume all the honey that they can, to secrete wax, and build but little comb during that time, and when they swarm they carry all the wax and honey with them that they can, to their new home, giving them a good start, and advantage over the colony that has been building comb freely and then divided.

It is true that some colonies that are divided do not work well for some time, but the most common cause is that the colony was preparing to swarm before the division was made—they have the swarming-fever, and will not work until they forget it, or obtain the desired result.

Now, which is the best way—let them swarm naturally, and hang around in the hive for a week or more, until half of the honey crop is over with before they swarm, or divide them before the honey-flow, and lose part of the crop, until they get ready to start hard-working, or divide them after the honey-flow,

and do almost nothing at all? I think the latter plan is the best, for when there is nothing to do there is nothing lost, if they do not work for a few days.

Where increase is wanted, I see no reason for not dividing them, for all the bees that are reared immediately after the harvest, become consumers instead of producers, and, besides this, the old colony, if not divided, will not get any stronger, as the queen has been doing her very best at egg-laying, and is sure to slack up some time after the harvest, and in two months, when the fall crop commences, the colony will not be any stronger thean either of the divisions would be.

Deer Plain, Ills.

Comforts in the Apiary.

CHAS. F. MUTH.

With an enthusiasm ever so well developed, every bee-keeper finds that bee-keeping has spells of hard labor in its tracks, and that muscle, energy and perseverance are requisites, without which none can prosper. The smoker has added so much to the comforts of the bee-keepers, that it has become indispensable in the apiary.

IMPORTANCE OF THE BEE-ESCAPE.

One of the latest inventions is the bee-escape. I was slow to comprehend its importance. Producing extracted honey exclusively, it was so easy a matter for me to take the filled combs from the second story, brush the bees off, and replace them with empty combs, that no improvements seemed possible. However, this season, I fastened Porter bee-escapes to ten boards covering the brood-chamber, stripped for the purpose.

The bee-space must be provided for on both sides of the board. To some of the boards I fastened two escapes, to others one, in order to satisfy myself if one would be sufficient to pass out all bees during a night. The escapes must be turned down towards the brood-chamber, as a matter of course.

One afternoon, when the combs of the upper stories needed extracting, I placed these ten boards with bee-escapes between the brood and the honey-chamber. This was any easy job. The next morning, when opening the second stories, they were emptied of bees, a few very young bees only had remained, and needed to be brushed off the combs. Before the robbers were aware of the fact that a hive was open, and before the bees of the hive knew what was going on, the full combs had been taken out, replaced by empty ones, the bee-escape taken off, and the hive covered up again. All of it was done without the aid of a smoker, and at a time when honey was scarce, and bees were on the warpath. The most sting-proof bee-keeper will appreciate the bee-escape with the first attempt, and place it among his indispensables in the apiary.

In the afternoon I placed my ten bee-escapes on ten other hives, with the same result the next morning.. As the bees were out of all the upper stories alike, it appears that ten to twelve hours is sufficient time for one Porter escape to accomplish the job.

VALUE OF THE QUEEN-EXCLUDER.

Another late addition to the comforts in the apiary is the queen-excluder. If it seems to make but little difference to the producer of extracted honey when his queens deposit eggs in the upper stories, let him try a queen-excluder, and he cannot help but find the difference in his labor when all the brood is confined to the lower story, and he may look for his honey to the upper story only.

The labor saved in the fall, when the bees have to be reduced to the lower story, will be appreciated by every one. The queen-excluder has come to stay.

But the knowledge of the best use of the queen-excluder we owe to our friend, G. W. Demaree, of Christiansburg, Ky. His *modus operandi* insures a crop during the worst season, as it is almost sure to prevent swarming, and consequently retains the foragers (the old bees) in every colony, unless the hive is smaller than a ten-frame Langstroth. Here is his method:

At the beginning of the honey season, when the colonies are strong, and swarms are anticipated, place all of the combs, containing brood, honey, and adhering bees, in the upper story, leaving the queen below (on a comb with fresh-laid eggs, or without); fill the brood-chamber with empty combs, place the queen-excluder on, then the second story on top, and cover up.

The bees will go down through the queen-excluder and assist their queen, and as the young bees hatch in the second story, their vacated cells will be filled with honey as soon as the flowers yield. The queen having plenty of chance to deposit eggs, and the bees

enough room to store honey, swarming is out of the question for awhile.

If comb honey is the object, one can place the sections on top of the second story, and put them on the brood-chamber after the combs of the latter have been filled. Even during this poor season, I had some sections nicely started in the third story, and finished on the brood-chamber.

We owe Mr. Demaree a vote of thanks for his close observation.

Cincinnati, Ohio, July 25, 1892.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

Aug. 17.—Wabash Valley, at Vincennes, Ind.
Frank Vawter, Sec., Vincennes, Ind.

Aug. 19.—Darke Co. Union, at Greenville, O.
Geo. H. Kirkpatrick, Sec., Union City, Ind.

Aug. 27.—Haldimand, at S. Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.

Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.

Jan. 13, 14.—S.W.Wisconsin, at Boscobel,Wis.
Benj. E. Rice, Sec., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich.

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

SELECTIONS FROM OUR LETTER BOX

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bee-Keepers' Union and Bee-Keeping.

After reading about the effect of the Union on page 72, I feel like joining it, so please find enclosed $1.00 for a year's membership, and put me down for the rest of my life.

I will be 39 years old on Sept. 12, and have kept bees for the last 19 years, but was a "bumble-bee keeper" since I was 5 years old. I generally put my bees out of the cellar on May 1, and commence to sell honey on July 7; but this year was an exception, for I put out my bees on May 16, and sold new honey on July 8, so you see it makes no difference whether I put my bees out on May 1 or the 16th. I have read the BEE JOURNAL for the last 15 years, and can't keep house without it.

WM. F. FRITZ.

Duluth, Minn., July 30, 1892.

[The Bee-Keepers' Union is doing a grand work, and its membership should number thousands, if only for the great *influence* such an "army of defenders" would have upon those who are inclined to treat bee-keeping disrespectfully. Let every lover of the pursuit, who wishes to enjoy his rights, send $1.00 to Thomas G. Newman, 199 Randolph Street, Chicago, Ills., for a year's membership. Do it now!—EDS.]

Moderate Crop—Foul Brood.

Bees in this part of the country are not doing as much as we anticipated they would. A moderate crop of honey, as far as I know, has been secured. The bees are just closing up on basswood.

Our bees have had the foul brood, and in consequence we have suffered quite a loss. I have driven them out this spring on foundation, and into clean hives, and have made a success of it, I think.

J. C. NEWMAN.

Peoria, N. Y., July 27, 1892.

Have Stored No Honey, Etc.

I commenced last year with 65 colonies, had 6 swarms, and got about 300 pounds of honey. I put into winter quarters 70 colonies, having lost one by moths. I have had 8 swarms this year, and saved 4; put on the supers the last week in May, since which 5 colonies have left their quarters, with no apparent cause with three, but two had slight signs of moth, but no live or dead moths or bees to be seen, they were evidently weak in the spring, as they did not swarm until June 20, unless the wet, cold weather kept them back? Up to this time many colonies had stored no honey in the supers, though we had an

abundance of white clover. 1. How do you get bees out of the supers? 2. How do you fix the bee-house for the bees to escape? I have wire in the windows running above the top, but the bees do not leave. A. M. CREEL.

Grand Pass, Mo., July 15, 1892.

[1. Use a bee-escape, several of which have been described and advertised in the BEE JOURNAL.

2. Make the windows to swing midway between the top and bottom, and when the bees are on the window inside, gently turn the window, and the bees will then be on the outside.—EDS.]

White Clover and Knot-Weed.

My crop of extracted clover honey per colony is 67 pounds, spring count. We await a good crop from knot-weed.

O. H. JOHNSON.

Essex, Iowa, July 28, 1892.

No Honey, and Bees Taxed.

The bee season, this year, has been an entire failure in this locality. At present I have 14 colonies, and they have not gathered a pound of surplus honey up to date. One obstacle against them is no white clover in existence here this year. The bee-keepers around here have the same complaint, and they claim it to be the severest season for bees in the past number of years; and if the incoming fall does not give them a better showing, they will not be able to survive the winter without feeding. As the taxes in this locality are quite heavy, the keeping of bees does not seem at all to be a paying business. My assessment is $1.00 for 14 colonies.

H. VAN DOREN.

South Branch, N. J., July 30, 1892.

Hints on Transferring Bees, Etc.

When you transfer bees at times when combs are heavy with honey, try giving the dripping, transferred combs to other colonies, the transferred bees clean combs of honey and brood, and see how much nicer it will work, as bees often become discouraged, and fail to clean up their combs, and swarm out and leave them in disgust. But the above plan is a sure remedy, for I have tried it thoroughly in the last ten days.

Remember that a queen never tears down a queen-cell built over a drone-cell, so you may get "fooled" in some way, at times. You can usually detect these cells from others by the place they occupy on the combs, or by their smooth appearance. What I mean by the "place they occupy" is, they are usually built over drone-combs.

Dip the bee-quilts in melted beeswax, and bees will not cut them nearly so badly. Soaking all the combs, or sealed sections, in clear water when moths have attacked them, is a good remedy.

MRS. JENNIE ATCHLEY.

Floyd, Tex., July 29, 1892.

Abundance of White Clover.

Bees are doing but little good here, owing to the rainy season; however, there is an abundance of clover, and no doubt the honey season is in the near future, as the rainy season seems to be over. Bees winter out-doors in this part of the country. THOS. WICKERSHAM.

Wickersham, Wash., July 24, 1892.

Italianizing Bees.

I have at present only 4 colonies of common black bees—in two box and two Langstroth hives. All neighbors around here having bees have black bees, there being no Italians here at all. 1. Is it desirable, under the circumstances, to Italianize my bees? If so, what is the best time? I have been told that in such a case the Italians cause more trouble than they are worth. Is this true? C. E. CHIPMAN.

Wolfville, N. S., July 28, 1892.

[1. No, as it would be about impossible to keep them pure, and you would have only cross hybrids, after a time.—EDS.]

Fine Quality White Clover Honey.

The bees have done fairly well in this (southwest) part of Iowa, taking the backward spring into account. It was hard work for me to keep my bees alive, as the spring was so cold and wet. June 10 found me with about 100 colonies with about a quart in each one; then the weather cleared up, and white clover covered the valleys with a white carpet, and what few bees there were gathered honey very fast for two or three weeks. I got about 6,000 pounds of white clover honey, of a very fine quality, both comb and extracted. The prospect is fair for a fall flow from heart's-ease.

J. R. ESKEW.

Shenandoah, Iowa, July 28, 1892.

Threshing Alsike Clover, Etc.

I have read with interest in past numbers articles on Alsike clover, and its profitable yield as a paying seed crop. Now, I would be thankful if some one would give the best method of threshing and cleaning the seed. Is a clover-huller needed, as in saving common red clover seed? I will be glad to see an article in the BEE JOURNAL giving the best method.

Our honey crop is a failure this year. We had a fair stand of white clover, but the weather conditions were such that much of it does not bloom, and what bloom we had, barely gave subsistence to the bees. E. DRANE.

Eminence, Ky., July 27, 1892.

[Perhaps Mr. M. M. Baldridge, who has had large experience with Alsike, will favor the readers of the BEE JOURNAL with an article giving the desired information.—EDS.]

Stored 40 Pounds Per Colony.

My bees have stored 40 pounds of white clover honey per colony this season. BERT LASBY.

Castle Rock, Minn., Aug. 1, 1892.

A Most Trying Season.

This has been the worst season for years. Bees were in first-rate condition before fruit-bloom, but we had a snow-storm on May 19 and 20, followed by cold rain, and it rained nearly all of June. We had no surplus on July 15, though a little since, perhaps, but none ready to come off. We have had violent storms, a cyclone, and what not. It has been a trying season.

L. J. SHERMAN.

Hanover, N. H., Aug. 1, 1892.

Asparagus—Shade for Bees.

Asparagus yields honey here in New Jersey. Its drooping, bell-shaped blossoms always contain nectar, and are visited by the bees in sunshine or shower. By breaking the blossoms apart, the nectar can be plainly seen.

We have not taken any honey yet, but we are not disappointed, as the hives are just "piled full" of bees, and we never hope for any surplus until fall. What is the matter with Jersey bee-keepers? It seems that "a slim trio" are all that make themselves heard through the BEE JOURNAL.

By the way, this hot weather that we have just passed through, has caused me to learn how to make an inexpensive shade for hives. The bees were hanging out in great bunches, so having a few old barrels handy, I simply knocked them apart, straightened the nails, placed two staves about 16 inches apart, and nailed the other staves on the top crosswise. Two foot long sticks on one end as legs to catch the hives when hung to the south side of the hive, made it complete. JOSEPH EHRET.

Trenton, N. J., Aug. 1, 1892.

They Prefer December.

We read all that was said regarding the meeting of the North American Bee-Keepers' Association, in the BEE JOURNAL for July 28. It would be *simply impossible* for queen-breeders, as well as many other bee-keepers in this locality, to meet at Washington in September. December would suit us better.

F. A. LOCKHART & Co.

Lake George, N. Y.

What Ails the Bees?

My bees are troubled with a disease known as "claviceps apium." They have been troubled with it for the last three years, but not, as I thought, seriously. So far this year they had been entirely free from all symptoms until July 21, and for the last 2½ days they have died very fast. On July 21, 4 colonies died, and to-day 50 colonies are dying very fast. I would like to know what is the trouble with them. I am at present giving them this preparation: Salicyclic acid, one ounce; soda borax, one ounce; water, 4 pints; but this prescription is of the year 1890, and I think that there may be some newer discovery since then.

F. M. HART.

Travers, Calif., July 22, 1892.

[Can some reader tell what the trouble is, and also give a remedy?—EDS.]

Poor Season for Bees, Etc.

The honey season has been very poor here. I wintered 19 colonies, and increased to 24 this season, my best colony giving me 25 pounds of comb honey. The full amount taken this year is nearly 75 pounds, as near as I can tell. I have kept bees three years, and use the eight-frame single and chaff hives.

I feed my bees when they need it, and do not allow them to starve. In 1890 I wintered 4 colonies, in 1891 I wintered 13, and last winter 19 colonies, and have not lost one colony. I am a great friend of the bees. We have very few bee-keepers in this neighborhood, but a great many "bee murderers." We will have to drop this season, and work for the next one. J. G. MAY.

Flattwoods, Pa., Aug. 2, 1892.

COMBED AND EXTRACTED.

Fuel for Bee-Smokers.

Take dry cobs and pound them up the size of hickory nuts or walnuts, and start the first time with a few coals from the stove. When refilling, save a few of the coals to start the fresh cobs; and if they have gone out, you can start or light them with a match, or use a little rotten wood to start them, as you cannot easily light the fresh cobs with a match. I prefer cobs, as the smoke is more agreeable to me, and to the bees, and it takes less to quiet them; no sparks to burn me and my clothes, nor ashes to blow into our honey while smoking the bees out of the crates. I can load a Clark smoker with cobs, so it will last three or four hours.—CHESTER OLMSTEAD, in *Gleanings*.

Personalities in Conversation.

Keep clear of personalities in general conversation. Talk of things, objects, thoughts. The smallest minds occupy themselves with personalities. Personalities must sometimes be talked, because we have to learn and find out men's characteristics for legitimate objects; but it is to be with confidential persons. Do not needlessly report ill of others. There are times when we are compelled to say, "I do not think that Bouncer is a true and honest man," but when there is no need to express an opinion, let poor Bouncer swagger away. Others will take his measure, no doubt, and save you the trouble of analyzing him and instructing them.

And as far as possible dwell on the good side of human beings. There are family boards where a constant process of depreciating, assigning motives and cutting up of character goes forward. They are not pleasant places. One who is healthy does not wish to dine at a dissecting table. There is evil enough in man, God knows; but it is not the mission of every young man or woman to detail or report it all. Keep the atmosphere as pure as possible, and fragrant with gentleness and charity. — JOHN HALL, D. D.

Iodide of Potassium for Bee-Stings.

I have never seen iodide of potassium mentioned as a sting-cure, but having heard of its use by a bee-keeper of forty years' standing, whose verdict was "relief and cure instantaneous," I tried it. I have only used it in three cases, in all of which it was successful. A juvenile cousin, aged seven, was stung on the hand, and the cure was so effective that the sting only "tickled" next day, as he expressed it, though he looked as if the "tickling" was too much for him at the time. In my own case the relief was instantaneous, and no swelling ensued the first time, when the remedy was applied at once, and very little the second time, when applied about five minutes after. The method of application is simply to hold a crystal of the iodide to the wound. It must be kept dry. One crystal can be use theoretically *ad infinitum—British Bee Journal.*

Convention Notices.

COLORADO.—The Colorado State Bee-Keepers' Association will hold their "Honey-Day" in Longmont, Colo., on Sept. 28th, 1892.

Littleton, Colo. H. KNIGHT, Sec.

OHIO.—The Darke County Union Bee-Keepers' Society will hold a basket meeting on the Fair Grounds at Greenville, Ohio, on Aug. 19, 1892. All bee-keepers are invited to attend.

GEO. H. KIRKPATRICK, Sec.

Union City, Ind.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.

Boscobel, Wis. BENJ. E. RICE, Sec.

Be Sure to read offer on page 197.

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An Apiary Register is a splendid book to have in an apiary, so as to know all about any colony of bees at a moment's notice. It devotes two pages to each colony. We will send one large enough for 50 colonies, for $1.00, postpaid; for 100 colonies, for $1.25; or for 200 colonies, for $1.50. After using it for one season, you would not do without it.

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The Apiculturist.....	1 75....	1 65
Bee-Keepers' Guide.....	1 50....	1 40
American Bee-Keeper.....	1 50....	1 40
Canadian Bee Journal.....	2 00 ...	1 75
Nebraska Bee-Keeper.....	1 50....	1 35
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Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

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7A1t Compton, Lee Co., Ills.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

WANTED—50 Queens of any kind except Black Queens. I will give 10 pounds of Melilot Clover Seed for a good Queen to be sent in August—Seed to be sent in September. Please send me a card, telling me how many Queens you want to exchange. R. MILLER,
7A1t Compton, Lee Co., Ills.

HONEY AND BEESWAX MARKET.

CHICAGO, Aug. 6.—No choice comb on the market. Some inquiries for new stock, with none to offer. A good article would bring 15 @16c. Extracted is very scarce, and plenty of inquiry for same; it would bring 7@8c. Beeswax—firm at 26@27c.; good demand.
J. A. LAMON, 44-46 S. Water St.

CHICAGO, Aug. 6. — Comb honey is dull and no demand. Selling finest grade white at 15c. With new crop prices will rule firmer. Extracted is scarce and in good demand at 7@7½c. Beeswax, selling at 26c.
S. T. FISH & CO., 189 S. Water St.

CHICAGO, Aug. 6.—New comb honey is offered at 15@16c. for best grades of white; dark, 10@13c., but sales are few, as the weather is hot, and fruit is used for the table. Extracted is selling at 6@7@8c., according to kind and quality. Beeswax, 23@26c.
R. A. BURNETT, 161 S. Water St.

NEW YORK, Aug. 6.—Extracted in good demand and fair supply. We quote: Southern per gallon, 65@75c.; orange bloom, 7@7½c. ℔ lb. Beeswax, 26@28c.
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., Aug. 6.—The old crop of comb honey is all cleaned up. First shipment of new comb honey this week, which we quote at 16c. for No. 1 1-lbs.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI. Aug. 6.— Demand is good for extracted at 5@8c. Ddemand is slow for comb honey. at 12@15c. for best white.
Beeswax is in slow demand, at 23@25c. for good to choice yellow.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, Aug. 6.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6@7c.; buckwheat, 5@5½c.; Southern, 65@75c per gal.; Calif., 6½@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c more per lb. for extra select.
CHAS. ISRAEL & BROS., 110 Hudson St.

ALBANY, N. Y., Aug. 6.— Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.
H. R. WRIGHT, 326-328 Broadway.

DETROIT, Aug. 6.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.
M. H. HUNT, Bell Branch, Mich.

NEW YORK, Aug. 6.—New comb and extracted honey is arriving in small quantities. Comb honey is in VERY light demand at 15@16c. for fancy white in one-pound sections. Extracted is selling at 6@8c. for white. Demand is limited. Comb honey we would advise keeping in the country until say about Aug. 25 to Sept. 1.
F. I. SAGE & SON, 183 Reade St.

SAN FRANCISCO. Aug. 6.—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax—24@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street.

BOSTON, Aug. 6.—Demand is light. White 1-lbs., 13@15c. No 2-lbs. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.
BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS, MINN., Aug. 6.—Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.
STEWART & ELLIOTT.

KANSAS CITY, Mo., Aug. 6.—Old honey is cleaned up, both extracted and comb. New crop will be in about July 10, here.
HAMBLIN & BEARSS, 514 Walnut St.

NEW YORK, Aug. 6.— Demand moderate, and supply reduced, with no more glassed 1-℔ nor paper cartons, 1-℔. We quote: Comb, 1-℔, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 120 Pearl St.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 197, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

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THOMAS G. NEWMAN, GEORGE W. YORK, } EDITORS.

Vol. XXX. Aug. 18, 1892. No. 8.

EDITORIAL BUZZINGS.

Fair is the flush of the dawning
Over the face of the sky;
Sweet is the tangle of music
From wild birds fluttering by;
Brilliant the glow of the sunset,
Graceful the bound of the deer;
And glad is the laugh of the children
Ringing like joy-bells clear.
—Selected.

Father Langstroth, in this issue of the BEE JOURNAL, concludes the account of his "head trouble." He wishes us to correct the reading of the first sentence of the second paragraph of his first "head trouble" article, found on page 174 of the BEE JOURNAL for Aug. 4, beginning thus: "I quote so largely," etc. He intended to have it read as follows:

I quote so largely from the blessed book, because I hope some of my readers, overpowered by gloomy foreboding, may find help from my own personal experience, and much more from their confirmation by God's word.

Not in September.—By the following announcement received from Secretary Hutchinson, we learn that it is now decided that the North American will *not* meet in Washington in the month of September. Bro. H. wrote us thus on Aug. 6:

FRIEND YORK:—I am now able to announce officially that the North American will not meet during the G. A. R. Encampment. As soon as it is known definitely what societies will meet in Washington near the end of the year, Mr. Benton will let us know, and a date will be chosen. Yours truly,
W. Z. HUTCHINSON.

Now that it is finally decided to hold the convention later in the season, there will be ample time for everybody to prepare to attend when the time does come. It will also give Bro. Hutchinson, and other leaders, a better chance to "fix up" a fine programme for the occasion. It should be made the largest and best convention ever held by the Association, as it will be a most favorable opportunity to impress the authorities at Washington with the fact that bee-keeping is no mere "side-show" following the "agricultural circus."

Prof. H. W. Wiley has again been heard from—this time in reply to a letter which we wrote him, asking what he "meant by the last sentence of his letter on page 77 of the BEE JOURNAL for July 14," referring to the words, "there is a motive for it," used by the Professor when speaking of apiarian periodicals seeming to side with the adulterators of honey. We asked him if he "meant to say, or even hint, that the bee-papers are in *league* with adulterators of honey." Here is his reply:

GEORGE W. YORK & Co., Chicago, Ills.

Gentlemen:—I am in receipt of your letter, asking what is meant by the expression, "there is a motive for it," in the letter published on page 77 of the BEE JOURNAL for July 14. In using this expression I had in view the fact that the bee-papers to which I alluded, viz.: the AMERICAN BEE JOURNAL in particular, and *Gleanings in Bee-Culture*,

had been actuated by a motive of personal hostility to the undersigned. This is particularly evident from the method which they employed in referring to my publications on the subject of honey.

In regard to the course of the bee-papers in denying the existence of the adulteration of honey, I had in view particularly the AMERICAN BEE JOURNAL, which had stated that although the adulteration of honey was formerly practiced to a large extent, it had ceased to be profitable, and it was now no longer carried on. These are not the exact words the paper used, for I am quoting from memory, but the idea. This motive of personal hostility seemed to be the cause of such assertions, since I could not really believe that the editors of the BEE JOURNAL were ignorant of the extent to which the adulteration was practiced.

I find, however, on further correspondence with bee-keepers, that it was the general opinion (up to the time of the publication of the official report) that the adulteration of honey was almost a thing of the past, and that the large quantities of liquid honeys which were placed on the market were practically genuine. I am,

Respectfully,
H. W. WILEY, *Chemist.*

We are glad to give space to the above explanation by Prof. Wiley, and also to know that he did not intend to suggest that bee-papers were trying to help the adulterators of honey. All who have read the AMERICAN BEE JOURNAL and *Gleanings* the past ten years know very well that they have been relentless in their warfare against the diabolical practice of adulterating honey.

We did think (and do yet, for that matter) that there was but little adulterating of honey being done, for if that were not the case, why the great scarcity of honey upon the markets during the past few years?

We have never harbored any "personal hostility" toward Prof. Wiley, but only felt that it was our duty, as well as privilege, to denounce what we believed deserved the severest condemnation on the part of every lover of the pursuit of bee-keeping. In so doing, we only lived up to the light as we saw it, and as we felt that justice to all demanded.

Adulteration of honey, even to the slightest extent, must cease! If Prof. Wiley, or any one else can *help* to put a stop to that nefarious practice, all bee-keepers and bee-papers will rejoice, and earnestly hope that the day of reckoning may speedily come to every infernal scamp that attempts to ruin so honorable and desirable a pursuit as bee-keeping, in order to increase his amount of "filthy lucre" by more filthy and detestable practices.

Only in the strongest *union* of all the *good* elements in any national moral effort, can there be hope for the overthrow of any great and threatening evil, and the final triumph of "that righteousness which exalteth a nation."

Dr. C. C. Miller, in his last "bundle" of inimitable "Stray Straws" published in *Gleanings*—which "straws" are both wise and otherwise, but always enjoyed—has a rye (awry) straw about the new editor of the BEE JOURNAL. The naughty (knotty) straw referred to looks like this:

> York, of the AMERICAN BEE JOURNAL, won't dare commit any crime, for his picture is getting into all the journals so much that he'd be detected and identified wherever he sought safety in flight.

We are glad the good Doctor reminded us of that fact, as it will keep us from doing something just awfully bad! We wish we could "get even" with him in some way, but it is too hot to try now. We think we will just pray that he may have an extra dose of "caloric" here, so as to be prepared for his hereafter. But then, a "man of straw(s)" will burn easily enough, anyway, so we may as well give up, and let the Doctor have his own way.

Salve.—Take equal parts of shoemaker's-wax, beeswax and rosin, mix and melt over a slow fire; add a little tallow to give the right consistency, and you will have a splendid salve. Spread on a piece of cloth and apply.—*Exch.*

Southern Minnesota Fair.—The Premium List has been received of the 13th Annual Fair of the Southern Minnesota Fair Association in connection with the Olmstead County Agricultural Society to be held at Rochester, Minn., on Sept. 12 to 17, 1892. We have examined the Premium List very carefully, and can find only two apiarian premiums, and those are offered under "Sugar, Syrup and Honey," of which department Mrs. F. R. Mosse is the Superintendent. The two items read thus:

Best shipment of honey in boxes	$4.00	$2.00
Best bee-hive method of securing the honey and taking care of bees	2.00	1.00

Just think of it, *nine whole dollars* offered as premiums to bee-keepers! What a wonderful inducement for a fine apicultural display! Those Fair (or unfair) managers ought to be labored with until they give some adequate recognition to bee-keeping. Some live bee-keeper in that region should see to it that another year something be done for our industry. A copy of the Premium List may be secured by addressing Mr. Geo. W. Granger, Assistant Secretary, Rochester, Minn.

Wireworms are quite exhaustively treated of by Prof. John O'B. Scobey, in Bulletin No. 4, of the Experiment Station at Pullman, State of Washington. A copy may be had by sending your name and address.

Mr. R. D. Avery, formerly of Independence, Mo., stopped at the BEE JOURNAL office one day last week. He was on his way to London Bridge, Va., where he expects to keep bees extensively. We wish him success.

Bees are often seen in the act of sucking the juices of fruits, but as a matter of fact, it is always wasps or other insects or birds that cut the skin.

The Iowa State Bee-Keepers' Society will hold their next annual meeting on the Fair Grounds at Des Moines, beginning at 1:30 p.m., on Aug. 30, and continuing two days. It is hoped that there may a large attendance. The following is the programme, which promises a "feast of good things:"

AUGUST 30—1:30 P.M.

1. Usual Preliminary Business.
2. Address by President.
3. Benefits of Bees to Agriculture—Frank Coverdale, of Welton.
4. My System of Wintering Bees—M. M. Hamilton, of Clearfield.
5. The Columbian Exposition, and the Duty of Iowa Bee-Keepers in Relation Thereto—F. N. Chase, of Cedar Ealls, Secretary of the Iowa Columbian Commission.
6. Questions by members.

AUGUST 31—1:30 P.M.

1. Is any Legislation Desirable for Iowa Bee-Keepers?—E. Kretchmer, of Red Oak.
2. Some of the Things I Don't Know About Bee-Keeping—O. B. Barrows, of Marshalltown.
3. Bees and Farming—C. D. Levering, of Wiota.
4. How Can Beginners be Best Educated Not to Ruin a Market for those of More Experience?—W. C. Frazier, of Atlantic.
5. What is the Best Way of Building up Colonies in the Spring for the Honey Crop?—Joseph Nysewander, of Des Moines.
6. Report of Treasurer and Miscellaneous Business.
7. Election of Officers.

Joseph Kirkland writes in the August *New England Magazine* by far the best account of the great Chicago Fire that has found its way into print. He gives a straight, connected story of the progress of the fire, like a good newspaper man who knows how to group his facts into a telling, vivid, and consecutive story. The article is fully illustrated from photographs furnished by Major Kirkland's Western Publishers, who possess the best collection of the kind in the country.

Mr. Benj. E. Rice, of Boscobel, Wis., died of lung trouble at 3 p.m. on Aug. 8, 1892. Mr. Edwin Pike, the President of the Southwestern Wisconsin Bee-Keepers' Association, sent us this sad information. Mr. Rice was not only the efficient Secretary of the above Association, but one of the most prominent and active bee-keepers in Wisconsin. He was born in Angelica, Allegany county, N. Y., in 1843, enlisted in the Union Army in 1861, and was badly wounded at a battle in Virginia. The BEE JOURNAL extends to the sorrowing relatives and friends its heartfelt sympathy in their sad affliction.

Be Sure to read offer on page 229.

Pulled Queens.—Dr. C. C. Miller, of Marengo, Ills., among his "Stray Straws" in the last number of *Gleanings*, gives this, which may be something new to many of our readers:

Young queens pulled out of their cells and introduced with success, is the theme of an item in the French *Revue*. We call them "pulled queens" at our house, and have used them for several years. Just tear open a queen-cell; and if the young queen is strong enough to hold on to the comb, she will be kindly received almost anywhere by merely placing her on the comb among the bees. Friend Root was quite interested on seeing us use "pulled queens" on one of his visits here.

Shipments of Beeswax.—Such should *not* be sent to George W. York & Co., or the AMERICAN BEE JOURNAL, as we do not handle it. Several have forwarded some to us, and we have in every case turned it over to Thomas G. Newman. Hereafter please remember that we *do not* handle Beeswax, or deal in Bee-Keepers' Supplies. We have also received orders for Supplies, which we have invariably turned over the same way as the Beeswax that was sent us.

Read S. F. & I. Trego's Advertisement.

Carelessness is never excusable, and especially when around an apiary. Many an accident around bees, either fatal or nearly so, might have been prevented if some one had not been careless. Mrs. Atchley tells in the following letter dated July 30, how she suffered financial loss through the carelessness of some men who were unloading hay in a barn near her apiary:

BRO. YORK:—As we all love to have some one to tell our trouble to, I will tell you of a terrible accident.

We have a very large barn, and we rented half of it to some hay-men to store hay in. Yesterday, while they were unloading, they let a bale of hay fall on one of the teams, and the horses ran away, and right through my apiary with the wagon-tongue down. The first hive struck was torn all to pieces; it contained a powerful colony, with 32 fine queen-cells (Doolittle) nearly ready to take off. Besides, they bursted and knocked over seven other hives. The damage amounted to more than $25.

I hope my experience will be the means of saving another such disaster. We all should be very careful with teams and wagons near the apiary.

MRS. JENNIE ATCHLEY.

Italian Bees.—Mr. Alexander Grant, of Lowell, Wis., on Aug. 7, 1892, wrote us as follows about a colony of bees he purchased, and questioned whether or not they are Italians:

I bought a colony of Italian bees last spring, and there are some bee-keepers here who keep Italian bees that say I was swindled. The bees I got are no larger than our common brown bees, and there are a good many small, black bees among them. The drones are as black as any black drones. Should not the drones be a little yellow, like the worker-bees? I would like to know the difference between the two kinds of bees. These little black ones are so cross, and will sting worse than a yellow jacket. They cost me $10, and $2.75 for express charges. Please let me know if they are anywhere near like the Italian bees. If not, tell me where to get some of the right kind. I do not think that I will keep these any longer than this fall; that is, if I can get better ones. The man I bought these bees from pretends to be one of the leading

bee-men of the country. I would like to have this put in the BEE JOURNAL so that he could see it.

ALEXANDER GRANT.

In order that Mr. Grant, as well as any others, may hereafter know what Italian bees should look like, we take this description of Italian bees from Prof. Cook's "Bee-Keepers' Guide, or Manual of the Apiary:"

"The Italian worker-bee is quickly distinguished by the bright yellow rings at the base of the abdomen. Perhaps "golden" would be a better term, as these bands are often bright orange. If

ITALIAN WORKER-BEE.

the colony be pure, every bee will show three of these golden girdles. The first two segments or rings of the abdomen, except at their posterior border, and also the base or anterior border of the third, will be of this orange-yellow hue. The rest of the back or dorsal surface will be much as in the German race. Underneath the abdomen, except for a greater or less distance at the tip, will also be yellow, while the same color appears more or less strongly marked on the legs.

"The workers have longer ligulæ or tongues than the German race, and their tongues are a little more hairy. They are also more active, and less inclined to sting.

"The queen has the entire base of her abdomen, and sometimes nearly the whole of it, orange yellow. The variation as to the amount of color is quite striking. Sometimes very dark queens are imported right from the Ligurian hills, yet all the workers will wear the badge of purity—the three golden bands.

"The drones are quite variable. Sometimes the rings and patches of yellow will be very prominent, then, again, quite indistinct. But the underside of the body is always, so far as I have observed, mainly yellow."

Live Bees and samples of liquids can now be sent in the mails to the Dominican Republic we learn from the following published in the United States Official Postal Guide for July:

POST-OFFICE DEPARTMENT,
OFFICE OF FOREIGN MAILS,
WASHINGTON, D. C., June 5, 1892.

The International Bureau of the Universal Postal Union, at Berne, Switzerland, has officially informed this Department that the Postal Administration of the Dominican Republic gives circulation in its mails to live bees and samples of liquids, fatty substances and powders. Consequently those articles will be admitted to the mails hereafter dispatched from this country for the Dominican Republic, provided they are packed in *exact* accordance with the conditions prescribed in paragraphs "i" and "j," Note 14, page 905, of the United States Official Postal Guide, for January, 1892.

By direction of the Postmaster-General, N. M. BROOKS,
Superintendent of Foreign Mails.

The Dominican Republic is just east of Cuba, being the eastern and larger part of the island of Hayti, which has an area of 18,000 square miles, and a population of 250,000.

The Cortland Union Bee-Keepers' Association will hold their annual picnic at Floral Trout Park, Cortland, N. Y., on Aug. 24, 1892. A special invitation is extended to all interested.

COMBED AND EXTRACTED.

Getting Bees Ready for Winter.

This is none too soon to have an eye to getting bees ready for winter. Plenty of good sealed honey, young queens, and vigorous bees are the *desiderata*. Let all good colonies alone if they are storing surplus. It is wise to save all the honey possible while the flow of nectar lasts.

On looking over an apiary of any size, colonies will be found that are not storing surplus, although they may have been a few weeks since; their case of sections may be partially filled, but they have swarmed probably more than once, and are so weak that they will not finish them during the season. One case of sealed sections is worth much more than many partially filled, and all such should be removed to colonies that are able to complete them, in lieu of giving empty ones.

When the case of partially-completed sections are removed, the state of the colony can be ascertained, and if found queenless it had better be united with some colony containing a laying one.—MRS. L. HARRISON, in *Prairie Farmer*.

Care of Comb Honey.

If one has surplus cases enough, the best way to care for the honey is to pile up the cases in a dry, warm room—never store it in a cool cellar. Pile the cases with sticks between, so the air can circulate through them. If the room is warm and dry enough, the honey in cells not capped over, will thicken and not run out.

If a queen-excluding honey-board has been used, there will be little or no pollen in the sections, and little danger from the moth. To guard against them, however, it will be best to fumigate once with sulphur about two weeks after removal from the hives.

When ready for market the sections should be put in nice, new shipping-cases, and should be sold only at fair, paying prices.—C. H. DIBBERN, in the *Western Plowman*.

Don't Fail to read all of page 229.

QUERIES AND REPLIES.

Overstocking a Location with Bees.

Query 832.—How many colonies of bees are required to overstock a location on a peninsula so narrow that within a range of three miles there are only about eight square miles of territory, with an abundance of fruit blossoms, white clover, basswood, milk-weed, and golden-rod?—Michigan.

From 100 to 150 colonies.—J. M. HAMBAUGH.

That is a pretty good lay-out. It might support 100.—C. C. MILLER.

That is a good location, but a very difficult question to answer.—H. D. CUTTING.

Commence with 50, and increase until you find you have too many.—E. FRANCE.

We have never tried such a location, so we could not answer knowingly.—DADANT & SON.

It is too hard a question. May be 100. Perhaps 200. Possibly 50—in some seasons.—EUGENE SECOR.

I should say that about 100 would be about the limit that can be profitably kept in such limited space.—C. H. DIBBERN.

No one knows. It probably depends upon the season. I think that more than 100 colonies would probably work in most seasons at a loss.—A. J. COOK.

I judge that such a territory as you describe might in a good season support 100 colonies. What number would overstock it I cannot tell.—M. MAHIN.

Much depends. Fifty or 100 colonies might not overstock it during an extra season, while a half dozen might be too many for a bad season.—J. P. H. BROWN.

As a rule, 100 colonies are enough in one locality; by separating your apiaries 1½ or 2 miles, you could probably keep double that number.—MRS. L. HARRISON.

I don't know. In fact, I don't believe much in the idea of overstocking. I only keep a few colonies for experimental purposes, so I have never had any overstocking in my own vicinity.—J. E POND.

I would think that such a location would support as many colonies of bees as any inland location, as bees do not, in my opinion, work to advantage beyond a distance of three miles.—G. L. TINKER.

If none of the flowers should produce nectar, one colony would overstock it; if all should produce in abundance, a thousand might not. This is one of the unknowable things except *Post facto*.—R. L. TAYLOR.

All depends upon the season. In a poor season a few colonies would overstock it. In years when a basswood tree would furnish the needs of a colony, a large apiary would thrive there.—G. M. DOOLITTLE.

I should judge that 100 colonies would find all they could do in such a place; but I would not like to risk any more unless the place is richer with bee-forage than any place I have ever seen. —G. W. DEMAREE.

That will depend upon the season. If the seasons should be like this has been in my locality, one colony would overstock it. An abundance of white clover bloom here and no honey; I am "feeding" to keep bees from starving. —A. B. MASON.

Oh, Bro. Michigan, you have got clear out of my reach. It would depend entirely, of course, upon the amount of honey-producing plants, etc., of your eight square miles. I would make a guess only, at 50 colonies.—MRS. JENNIE ATCHLEY.

Do you mean by a "range," a radius, or diameter of three miles? Bees will readily work 3 miles in every direction on the land. Eight square miles would support from 40 to 100 colonies, according to flora and seasons, I would guess.—JAMES HEDDON.

So much more depends upon the management than upon the acreage, that it is very difficult to answer such a question satisfactorily without knowing whether comb or extracted honey is to be produced, and *who* is to take charge of the bees. With 80 colonies to the square mile, it would be well stocked.—MRS. J. N. HEATER.

The location described in the question is certainly a good one, so far as flora is concerned. The production of honey, however, depends upon atmospheric conditions, and the kind of season generally; not on the acreage or upon the flowers, for even white clover, usually such a generous honey-producer, is reported to yield no honey at all in some localities this year, where generally it has yielded abundantly. Such reports come every year from some locality or other, and atmospheric conditions are responsible for such a state of affairs. It would certainly be advisable to try 50 or 60 colonies, and increase the number until you know experimentally the proper number to keep.—EDITORS.

Home and Country, of New York, appeared in July, and will thereafter among the illustrated magazines. Its specialties will be Literature, War History, Finance and Industrial Progress. Among the interesting features of the first number are descriptions of the trial trips of the *Clermont* and *Orleans*, the first steamers navigating the Hudson and Mississippi; a full yet concise discussion of Senator Peffer's bill for the nomination and election of Presidents by direct vote of the people written by its author; several well-written articles upon Finance and Trade, adapted to the understanding of ordinary readers; reminiscences of Grant and Lincoln; short stories, and a full-page illustration of the Battle of Atlanta.

The subscription price of "Home and Country" is $2.00 per year. A copy of the "United States Official Postal Guide," containing lists of all post-offices in the United States, will be given to every subscriber at the regular subscription price.

Your Subscription to the BEE JOURNAL—is it paid up to date? If not, please send to us a dollar for a year, and thus show your appreciation of our efforts in your behalf. Look at your wrapper-label, and if the date looks like this—"Dec91," that $1.00 sent to this office will make it look like this—Dec92.

The Globe Bee-Veil, which we offer on the third page of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, with $3.00.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

An Account of My Head-Trouble.

REV. L. L. LANGSTROTH.

(Concluded from page 175.)

When 75 years old, the blind piles, of which my physician spoke in my youth, became only too apparent. I suffered so much that I seldom went aboad, and spent most of my time in a reclining position; and I was able to get home from my last attendance at church only by planting my hands and knees on the bottom of the carriage.

While thus suffering, my friend Dr. G. W. Keeley, of Oxford, O., urged me to put myself under the care of Dr. Prezinger, of Greenville, O., who had been very successful in curing persons similarly afflicted. At first I declined to be treated, saying I was too old to be cured, and believed it better, not to leave *well* enough alone (for there was no "well enough" about my case), but to leave *bad* enough alone. Interviews with parties at Oxford, however, who had been entirely cured by him, changed this decision.

An examination, made by the doctor in the presence of Dr. Keeley, showed that I was suffering severely from bleeding ulcers and numerous piles, one of which had been extruding for nearly a year. On the doctor assuring me that he could effect a radical cure, I placed myself under his care. No cutting, burning, or clamping operation was performed; and I received only one treatment a month. I suffered no pain worthy of mention.

My family physician had before this assured me that my melancholy came mainly from a diseased state of the rectum: but he failed to cure me. Before I was fully relieved by Dr. Prezinger, I fell again into my usual morbid condition, and did not see him for about two years.

While under treatment I conversed with many of his patients, and for the first time became aware of the intimate connection between melancholia and rectal disease. I believe that, without a single exception, all with whom I conversed, admitted that they were sufferers from mental depression.

Some confessed even to suicidal inclinations. I remember one in particular who said, "I often thought of taking my life, and was deterred only by apprehensions of what would become of my dear wife and our poor little children!"

How often we hear it said, that *religion* is a leading cause of so much melancholy and insanity! I firmly believe that, where one person is made insane by perverted religious views, many are kept sane by the consoling hopes of the gospel of Christ. If a man has no belief in a loving Father, and no fear of "that dread bourne from which no traveler returns," why should he wish to live on, when to live is only to be wretched? Why should he not believe with Hume, that suicide is only "the diversion of the current of a little red fluid?" Very often no motive is strong enough to prevent a man from taking his life; but consideration for those who depend upon him for support, and the horror of leaving to family and friends a suicidal legacy.

Removing from Oxford to Dayton, and recovering again, I sought further treatment, and seemed at last to be almost if not completely cured. I had better health, and for a longer period than I could remember to have ever enjoyed in all my previous life; and for the first time in many years I strongly hoped that I should have no return of my former troubles. But after an interval of a year and a half, the old symptoms returned. I fought them again in every way that I could, but, as usual, the battle was not won. Clouds and darkness settled upon me so that I could say, in the words of the 88th Psalm, "My soul is full of trouble; I am counted with them that go down into the pit: I am as a man that hath no strength. Thou hast laid me in the lowest pit; in darkness, in the deeps. Thou hast put mine acquaintance far from me; I am shut up and I cannot come forth."

Previous to this last attack I always expected, even when most exuberant, that, sooner or later, I should again fall under the power of the old disease. Many of my readers will naturally think that such an expectation, suspended over my head like the sword of Damocles, must inevitably have caused me constant and distressing apprehensions; but, instead of this, scarcely any fear of the future distressed me. I could almost always say, "Sufficient unto the day is the evil thereof," and I was very much like a playful child. Go to it an say, "Dear little child, this is a very sorrowful world! How can you, then, be so light-hearted when so many trials are in

store for you?" The happy child will not suspend his sports even long enough to listen to your sad forebodings.

I have often thought, that, but for the special mercy of our loving Father in freeing me, when well, almost entirely from dismal apprehensions, I could never have lived and retained my reason so long beyond the period usually allotted to man.

I should here say, that, in my worst attacks, I was never subject to any illusions. I always knew that physical causes mainly were at the bottom of my sufferings, and felt sure that, as soon as these disappeared, I should be happy again. But as, in my cheerful moods, I seldom felt any dread of the future, yet when under the power of the disease, it was almost impossible for me to even conceive how I could ever be well and happy again.

While the nauseated stomach rejects the most wholesome food, the patient knows all the time that this is only disease; but this knowledge not only fails to stimulate his appetite, but it seems to him almost impossible even to imagine how he can ever want to eat again.

Since my recovery, in the fall of 1887, I found that Dr. Prezinger's treatment had not been continued long enough to complete the cure; but as soon as the relapse was fully established, no persuasions of my family could induce me to submit to further treatment.

In revising this statement, I ought to correct what I said about there never being but one issue to an attack after its incipient stages were clearly developed. In the fall of 1853 I was as much depressed as I had ever been, when, by the kindness of friends, I was able to visit a brother who was residing in Matamoras, Mexico. While traveling by steamboat, railroad and stage-coach to New Orleans—a journey which then occupied over a week—I recovered entirely before I reached that city, and had an unusually long interval of complete relief.

Also, on another occasion while greatly despondent, I was summoned, at the expense of one of the parties, as a witness in a suit at law, which had been brought against him for an alleged infringement on the right of another patentee. The entire change of scene, with all its many diversions, completely cured me. But for these instances, I might naturally infer that time was the only remedial agency, and that the disease could never be arrested, but must always run its usual course.

Among the many mistakes of my life, I count this to be one of the greatest, that, instead of seeking an entire change as soon as I begin to feel the approach of another attack, I have usually refused to admit the possibility of succumbing to it, and have struggled against it until no power of will was left for further conflict. Those who know how large a portion of my life I have lost by this disease will not be surprised at my unwillingness to quit my work, when to give it up often meant to forego opportunities never to be recalled. Besides all this, I have usually been so straitened for means that it has been very difficult for me to give up my necessary avocations for change of scene.

With thankfulness to God I can truly say that few men have had better friends, and that there has never been a time when I might not have secured means for travel and change of occupation simply by applying to them. But I have received so many favors, often most unexpected and entirely unsolicited, that it is only with extreme reluctance that I have been able to ask assistance of even my most intimate friends and relations. It may well be that some of them will be pained to know that I did not do so, when a little timely aid might have preserved me from long periods of suffering and inactivity. For the many favors I have received from bee-keepers at home and abroad, and from personal friends and relations, I hereby tender my most heartfelt thanks.

No doubt some of my readers will blame me for spending so much time, when under the power of melancholy, in playing chess, even though I tempted nobody else to waste any time upon it. But I most devoutly believe, that, in fighting such a malady, the end fully justifies all means which are not in themselves immoral. It would be well, if it were plainly understood, and more fully realized, that, by dwelling too long upon painful subjects, we may at last lose mental control and become absolutely insane, there is no doubt that many who have strong hereditary tendencies that way may, by wise foresight and strong effort, counteract them.

The following true story will make more emphatic the above remarks:

About 50 years ago the Rev. Dr. Walker, who was a pastor of the Congregational church in Brattleboro, Vt., exchanged pulpits with me. On Saturday evening his wife spoke of the singular state of mind into which a well-known minister had fallen. He had

been a very acceptable pastor, and had declined, but a short time before, an invitation from an institution of learning, to solicit funds for them. As they still urged him to accept, he called a council of the neighboring ministers, who advised him not to accept the agency; whereupon (such often is human nature) he rejected their advice.

From the beginning of his work, his health, which before had been unusually good, began to fail. He became discouraged and morbid; and in conversation with Mrs. Walker, he contended that his afflictions were even greater than those of Job. He was reminded by her of a Christian brother known to both, who, after an absence from home of a few days, found, on his return, his beloved wife dead, and her dead infant lying in her arms. Even such an overwhelming calamity he thought was more bearable than those which had befallen him!

At this point in her narrative I became too much excited to sit still. Rising to my feet, I exclaimed, "Oh, that I could see this unhappy brother, and warn him of the fate, which, if he persists in cherishing these delusions, may soon overtake him! He is on the very verge of insanity, if not already insane."

After the sermon next morning, Mrs. Rockwell, the wife of the superintendent of the insane asylum of that place, said to us, "Do you know that Mr. ———" (the very brother we had been talking about) "was brought to our institution last night, quite insane?"

I once related this circumstance to a family circle, entirely unconscious that it could have any personal application. To my surprise, the father of the family privately said to me, with deep emotion, that nothing could have been told better adapted to influence for good one of his own children.

Oh, how often does some bereaved soul cry out in anguish, "I do well to give myself up to the indulgence of grief. I have no heart for anything but lamentations for the loved ones who have been buried out of my sight!" No! poor, afflicted soul, you do not do well when you neglect any positive duty. Beware lest what you call "the luxury of grief" may be carried so far as to become rebellious murmurings against the divine will.

I cannot here forbear giving a short extract from Walter Scott's Antiquary. An old fisherman had lost his son in a storm at sea. His landlord makes him a visit of condolence.

"When he came in front of the fisherman's hut he observed a man working intently, as if to repair a shattered boat that lay upon the beach; and going up to him he said, in a tone of sympathy, 'I am glad, Saunders, that you feel yourself able to make this exertion.' 'And what would ye have me do,' answered the fisherman, 'unless I wanted to see four children starve because one is drowned? It is weel with you gentles, that can sit in the house with handkerchers at your eyes when ye lose a friend; but the like of us maun to our work again, if our hearts were beating as hard as my hammer.....She maun be mended for the mornin' tide—that's a thing of necessity.'" Let us thank God for these "things of necessity."

Many of my experiences when under the attack of melancholia resemble very closely those of the poet Cowper. He had long spells of despondency, when his pen was entirely idle, and no persuasions of his most intimate friends could induce him to resume employments in which he once took so much delight. After he had abandoned, apparently for ever, the revision of his translation of Homer's Iliad, a relative one day placed on his writing-desk the manuscript at the place where he had left off, together with his books of reference. It was with great delight that he perceived that it attracted the attention of the afflicted poet, and that he began to resume the work of revision, so long suspended.

This reminds me of an incident in my own experience. The first revision of my work, "The Hive and Honey-Bee," had been about one-third completed, when the return of my disease compelled me to lay it aside for nearly a year, and nothing could induce me to resume it. My wife and mother had been for some time noticing that the violence of the attack seemed to be wearing away, and were daily hoping for some more decided signs of improvement. My mother, in joyful excitement, said to my wife, one day, "Oh! our dear one will be well again, for I saw him in his study, with his pen in his hand." They had both learned, from long experience, how invariably in my case, were *the cramp mental and the cramp digital* associated together.

How often has Cowper's sad history awakened our deepest sympathy! and to think that he never recovered from his last attack, but passed away under the terrible delusion that he was a hopeless outcast from all God's mercies! Let me give some of its mournful stanzas

from the last original piece Cowper ever composed :

THE CAST-AWAY.

Obscurest night involved the sky !
Th' Atlantic billows roared,
When such a destined wretch as I,
Washed headlong from on board,
Of friends, of hope, of all bereft,
His floating home for ever left.

He long survives, who lives an hour
In ocean, self-upheld ;
And so long he, with unspent power,
His destiny repelled ;
And ever, as the minutes flew,
Entreated help, or cried, "Adieu !"

No poet wept him ; but the page
Of narrative sincere,
That tells his name, his worth, his age,
Is wet with Anson's tear.
And tears by bards or heroes shed,
Alike immortalize the dead.

I therefore purpose not, or dream,
Descanting on his fate,
To give the melancholy theme
A more enduring date ;
But misery still delights to trace
Its semblance in another's case.

No voice divine the storm allayed,
No light propitious shone ;
When, snatched from all effectual aid,
We perished, each alone ;
But I beneath a rougher sea,
And whelmed in deeper gulfs than he.

Such a close to his sorrowful life is verily one of the inscrutable mysteries of Providence. God's judgments are indeed a great deep ; and when, to human sight, only clouds and darkness are around about him, we are sure that justice as well as judgment is the everlasting foundation of his throne, and that what we know not now, we shall know hereafter.

Blessed be the teachings of that Book which enable us to follow the flight of such a soul as that of Cowper's from all the fetters and limitations of diseased flesh and sense to the presence of Him who brought life and immortality to light !

Through life's vapors dimly seeing,
Who but longs for day to break ?
Oh, this mystery of being !
When, oh when ! shall we awake ?

Oh the hour when this material
Shall have vanished like a cloud—
When, amid the wide ethereal,
All th' invisible shall crowd.
And the naked soul, surrounded
With realities unknown,
Triumph in the view unbounded,
Feel herself with God alone !

In that sudden, strange transition,
By what new and finer sense
Shall she grasp the mighty vision.
And receive its influence ?
Angels guard the new immortal
Through the wonder-teeming space,
To the everlasting portal,
To the spirits's resting place.

Can I trust a fellow-being ?
Can I trust an angel's care ?
Oh, thou merciful All-seeing,
Beam around my spirit there !
Jesus, blessed Mediator,
Thou the airy path hast trod !
Thou the Judge, the Consummator,
Shepherd of the fold of God !

Blessed fold ! no foe can enter,
And no friend departeth thence ;
Jesus is their Sun and Center ;
And their Guide, Omnipotence.
Blessed ! for the Lamb shall feed them,
All their tears shall wipe away—
To the living waters lead them,
Till fruition's perfect day.

Lo, it comes ! that day of wonder ;
Louder chorals shake the skies ;
Hades' gates are burst asunder—
See the new-clothed myriads rise !
Thought, repress thy vain endeavor ;
Here must reason prostrate fall ;
Oh th' ineffable for ever !
Oh th' eternal All in all !

—JOSIAH CONDER.

Dayton, Ohio, July 14, 1892.

Pleurisy-Root as a Honey-Plant.

JAMES HEDDON.

In a recent number of the AMERICAN BEE JOURNAL I recollect reading in a report of some botanist to whom had been sent a plant of "pleurisy" (he called it), that said plant was a variety of milk-weed, and tangled the bees as they gathered the honey. I doubt that the plant was pleurisy, and if so, why should that splendid honey-plant here possess no such tanglers ? Our pleurisy surely has no such threads, and no one ever saw a bee tangled nor bothered in the least, in any way, when gathering honey from that plant.

Again this year it is yielding copiously (it always does), and the best yields of basswood never attract the bees from it. It not only blooms with basswood, but weeks afterward. It is too bad to have such a false impression go among bee-keepers regarding their best friend—this best of all honey-plants—the pleurisy.

While it is one of the milk-weed family, it has milk only in the root, and certainly has no "tanglers"—at least the variety we have has not. It is a perennial, hardy and tenacious, and in no sense noxious. This plant, together with sweet clover (both growing in waste places), is now keeping our two large apiaries quite busy.

Dowagiac, Mich., Aug. 4, 1892.

Read our great offer on page 229.

The "Bee-Kings" in California.

WM. G. HEWES.

Most of the California bee-keepers aspire to be "bee-kings," but which they will not be until more attention is given to the management and care of the bees, and less to the acquisition of monstrous honey-tanks and jumbo extractors. There are many apiaries here where the honey-tanks have a capacity of from 20 to 40 tons—more than the apiary can fill in three seasons on an average. These jumbo extractors, which most of the bee-men think a necessity, a little reasoning will show to be a useless expense.

I have alone taken in one day, with Thomas G. Newman's Excelsior non-reversible extractor, 1,000 pounds of honey. Four persons can take 3,000 pounds. A good season here lasts eight weeks. Working six days a week, and taking out 3,000 pounds a day, we have 144,000 pounds of honey. Is there any bee-keeper in the world who ever took that much honey from one apiary? The largest amount I have ever known taken from one apiary in one season was 80,000 pounds. That was in 1884, when the honey-flow continued for four months. In that time that amount could be taken on the small machine.

But it is useless to go on; for anybody can see that $50 machines are money out of pocket, not to speak of 30-basket steam-power affairs, such as one of the fraternity in Cuba uses. The climate of Cuba must be very enervating. In none of the reports from Mr. Osburn, which I have seen, does he claim a crop of 80,000 pounds. His season lasts, according to his statements, four months. Why! fie upon you! I can take single-handed, with the meanest little machine ever constructed, that amount of honey in that length of time. If this last statement of mine smacks of braggadocio, remember that the habit of lying is said to be superinduced by our glorious California climate!

Reversible extrators are a good thing, as the combs do not break down so badly as in the non-reversible ones. When my extractor is worn out, I shall get a Cowan extractor. I believe that the biggest crop in the biggest season that ever has been or will be taken from one apiary, can be handled easily with a $10 Cowan.

In *Gleanings* I have sometimes seen a statement by the editor, which reads something like this: "In California, where crops of from 50 to 100 tons are taken in a single season," etc. Mr. Root, will you please name an individual whoever secured a crop of 100 tons of honey? Have you not been imposed upon by the formidable array of tanks? Seeing the tanks, you naturally thought they were sometimes filled. I have lived in and kept bees in Ventura and Los Angeles counties now for nine years; and the biggest crop I ever heard of was that of Easley, who, in 1884, from two (and I am not sure but that there were three) apiaries took 87 tons of honey.

Two years later, from the same apiaries, Mr. W. T. Richardson, then and now the proprietor, canned up some 60 tons. Mr. Wilkin scattered bees all over Ventura county in 1884, and satisfied his ambition with a crop of 50 tons. Mr. Moffitt is reported to have had two crops of 50 tons. Mr. Mitchell, of Soledad Canyon, Los Angeles county, has had the pleasure of some 40 tons of honey as the product from his bees for a single season, and a few more I can name who have secured from 20 to 30 tons. But a large majority of the would-be "bee-kings," among whom is your humble servant, have never topped 10 tons.

The largest yield to the spring colony, of which I know anything definite, is that of Mr. Wm. Whittaker, of Piru Canyon, Ventura county; in 1884, from some 150 hives, he took over 30 tons; 419 pounds per colony is, I believe, the exact average. Mr. Nathan Shaw, also of Ventura county, somewhere back in the seventies, averaged more, I believe, than Mr. Whittaker, but I have not the exact figures.—*Gleanings.*

Newhall, Calif.

Honey-Vinegar from Cappings, Etc.

H. FITZ HART.

Drain the cappings dry, and put them into a barrel that they will about two-thirds fill; cover with water, and let stand 48 hours. Drain the liquor off, press the cappings tightly together, and in 24 hours the heat will rise (like a hot-bed) to about 120°.

The sweetened water is now taken and tested with an egg; if too weak, add honey, if too strong, add water. It is then heated over a fire to about 110° (part can be heated sufficiently to bring the whole to that point, but unless the weather is cold, the heating is not abso-

lutely necessary), and again poured over the heated cappings; let stand again for 48 hours, and pour off into the barrel it is to remain in. A few combs filled with pollen will be found to accelerate the alcoholic fermentation. By this process I have made strong honey-vinegar in six weeks. A lot started on July 11 is now far advanced in acetic fermentation.

We have had rain here every day since June 8, resulting in a considerable diminution of our honey crop. I have extracted from 150 colonies only 3,600 pounds of very dark honey, but the bees are stronger than usual at this season, and the prospect of a fall crop is good, provided it does not rain for another two months as it is raining now.

Avery, La., July 30, 1892.

The Season in N. W. Wisconsin.

REV. STEPHEN ROESE.

The season of 1892 with its discouraging experience will long be remembered by bee-keepers in this section of the country. The losses by winter-killing were few, but spring dwindling and starvation swept away more than one-half of the bees through the country here.

The weather having been cold and rainy all the spring and forepart of the summer, even to this date (July 30) with the exception of a few hot days from April 1 until June 20, we did not have 15 full days of sunshine, and bees dared not venture from home, for they never would return. The season being uncommonly late, and no nectar in any of the honey-producing plants, the best cared-for colonies were soon brought to the verge of starvation.

Apple-bloom did not benefit bees in the least, all clover fields having been killed out, and what little white clover did appear, did not seem to be noticed by the bees; and were they not fed and specially cared for here, the young brood would chill, and colonies die off one by one.

On reading the wonderful honey reports, and bees booming, in the BEE JOURNAL, the sensible bee-keeper's thoughts were nearly brought to a stand-still. Providence must either have favored special ones, or forgotten to be gracious to others. Mr. C. Theilmann, of Theilmanton, Minn., has given a fair picture and true statement of things regarding apiculture in this section of the country; and judging from the tenor of most of the writers in the AMERICAN BEE JOURNAL, his statements are correct.

It is only during the last three or four days that bees have been busy on basswood, but surplus honey of any kind has not been seen yet, for truly not more than two weeks ago the combs in the brood-nest were empty of honey, and only the strong colonies retained their drones. Swarms have been very few and late, only such colonies which were strong in early spring had made preparations for swarming. The writer has thus far not realized one new swarm to every 3 colonies alive this day.

The late and most terrible storms we had here a few days ago, have laid nearly all crops of any kind flat on the ground, as if a roller had passed over them; and unless buckwheat and fall flowers will help us out, bee-keepers will have to feed their bees for winter, to save them from starvation.

The writer saved about two-thirds of his apiary as "by the skin of the teeth," by feeding carefully, and placing hot bricks over the brood-nest night and day to keep the young brood from getting killed, and leaving on the winter packing until the middle of June; and for all this labor and anxiety I have not one drop of honey yet. I wonder if Dr. Miller thinks this is fun.

Maiden Rock, Wis.

The Wintering Problem.

C. LOWER.

What I know about the wintering problem is this: That the first two points in wintering bees that are in a healthy condition, with plenty of stores, is to keep them dry and quiet; top ventilation will give the former, and to keep bees quiet in winter quarters, the temperature must not mark more than 47° above zero.

I prepare my bees for winter quarters thus: The hives are 1½ story, with cloth over the brood-frames, which I turn back 2 inches at the *back* part of the hive, and cut a piece of wire-screen large enough to cover the opening, and then fill up the hive with oats straw, so full that the cover will not go down by abont one inch, and I find that the underside of the cover, and one or two inches of the top of the straw, kept quite wet, while the lower part of the straw, and also the bees were dry and comfortable.

Winter before last my bees, in this condition, survived a temperature of 16° below zero; and last winter a neighbor left his bees on the summer stands without any protection until Jan. 15, while on the mornings of Jan. 12 and 13 it was 18° below zero, and his bees were still all right.

Mr. W. W. Duffield (Sept. 17, 1891, page 367) mentions cases where bees in eastern Kentucky survived the winter of 1886 by top ventilation, although he attributed to other causes. And Mr. J. H. Andre (April 28, 1892, page 576) gives an account of 10 colonies being lost for the want of top ventilation.

Last winter I kept a thermometer in my bee-house, and one out-doors from Dec. 19, 1891, and about sunrise each morning noted the degrees of each until Feb. 26, 1892, and the lowest was on Jan. 19, 1892, when it marked 3° below zero in the bee-house, and 22° out-doors; and the highest in the bee-house was on Jan. 24, 1892, at 2 p.m., when it went up to 48° above zero, and the bees became *very* restless. On Feb. 25, 1892, at 4 p.m., the same degree was reached with the same result; and on March 13, 1892, when it was 29° above in the bee-house, and 22° out-doors, I placed the thermometer in a hive, on top of the brood-frames, with the cloth removed, and in one hour it showed 62° above zero.

I tested another hive in the same way, with the same result, showing a difference of 33° inside and outside of the hive; and if the thermometer had been placed in the cluster of bees, it probably would have shown 10° or 15° higher than it did placed above them.

It is hard to freeze a healthy colony of bees, if they are kept dry, but if the dampness that arises from the bees is suffered to condense in and around the cluster, freezing is a dangerous point to reach.

Decorah, Iowa.

Non-Swarming Hives and Self-Hivers.

JOHN CONSER.

The season here is very backward. White clover is not abundant, although enough to keep the bees breeding up, and cause swarming with the strongest colonies. Bees are working in the sections some, although the crop of white honey will be a short one. I work two apiaries, one in the non-swarming hives and new methods, of 60 colonies, and no swarms from any of this apiary. The hives are running over with bees, and in fine condition. The most of my honey will be from this apiary this season.

The other apiary of 80 colonies is run on old principles with the Simplicity hives, and the bees have been swarming almost every day for the last two months, and doing very little in the sections. I have had some colonies that swarmed three times with laying queens, in the last two months.

I have been testing three of the Alley-Dibbern self-hivers this season. It has been a failure as far as hiving the bees in the other hive. Although the queen is hived in the new hive, the bees vacate and go below to their brood every time, one or two hours after swarming. It is "no go" unless the combs of the old hive are shaken in front of the new one, then moved away. This is a good deal of work, and no better than dividing the old colonies, by taking away one-half of the combs and putting them in a new hive, and allowing them to rear a queen. Both methods cut off the surplus honey.

Again, with the self-hiver three or four swarms will unite on some tree, even if their queens are caged in the trap; they will remain awhile, then all will go into one hive together, or to the woods, with some virgin queen.

Sedalia, Mo., Aug. 6, 1892.

The Season—White-Ringed Bees.

J. W. MILLER.

By the way, I keep bees, too, and everywhere I go I am asked, "How have your bees done this season?" Well, I am going to tell. There are two answers—one is "Swarming," and the other is "Honey." I had 14 colonies last spring, and they swarmed 68 times, and my honey crop is 1,200 pounds short. I never saw white clover in such abundance, and basswood, buckwheat and all kinds of flowers. My bees are under perfect control, and when I started them off on clover, they would return, and if they could have talked they would have said, "There is no sweet there." Basswood and buckwheat was the same. I would like to hear a reason why there is no honey this season in some localities.

I have had great experience in bee-hunting, having found as high as 38 trees in one season. Three years ago last spring I found three trees which I cut, took the bees home, and put them

into hives. Two colonies were Italians, and one was white-ringed. The white-ringed bees seem to know just how to take care of their honey.

Two years ago I wanted some of their honey, and went to a hive, opened it, and began to take out honey, but I was obliged to drop it and take the "white-rings" out of my hair and clothing. I thought they would sting me to death, sure. I ran, I rolled, I hallooed, I kicked and I jumped. Finally, my wife came to my assistance with pails of water, and began throwing it on me, which soon made the bees let go.

I then set a day when I would try them again, but I went prepared with netting and tub of water. I opened the hive and began by throwing water on them, and in five minutes there was not a dry bee in the hive. It conquered them, so that they are now just as quiet as any of the rest of my bees. They are the longest, and have five distinct white rings, and will winter out-of-doors. My best white-ringed colony, last year, stored 112 pounds of surplus honey, while the Italians stored 72 pounds.

I would like to know if this white-ringed bee is known, and what its race is.

Rodney, Mich., Aug. 4, 1892.

[Will Prof. Cook please give some light on the "white-ringed bees?" It might be well for Mr. Miller to mail a sample of the bees to Prof. Cook, at Agricultural College, Mich., for examination.—EDS.]

Convention Notices.

COLORADO.—The Colorado State Bee-Keepers' Association will hold their "Honey-Day" in Longmont, Colo., on Sept. 28th, 1892.

Littleton, Colo. H. KNIGHT, Sec.

PENNSYLVANIA.—The Susquehanna Co. Bee-Keepers' Association will hold their 11th annual meeting at Rush, Pa., on Thursday, Sept. 1, 1892, at 10 a.m. All are cordially invited. Bring along any new fixtures of interest that you may have. H. M. SEELEY, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.

Boscobel, Wis. EDWIN PIKE, Pres.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

Aug. 19.—Darke Co. Union, at Greenville, O.
Geo. H. Kirkpatrick, Sec., Union City, Ind.

Aug. 27.—Haldimand, at S. Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.

Aug. 30, 31.—Iowa State, at DesMoines, Iowa.
J. W. Bittenbender, Sec., Knoxville, Iowa.

Sept. 1.—Susquehanna Co., at Rush, Pa.
H. M. Seeley, Sec., Harford, Pa.

Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.

Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.
Benj. E. Rice, Sec., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Best Season Ever Known.

Last season was one of the poorest honey seasons we have ever had in this section of county. From 90 colonies I did not get one pound of nice honey. This season is one of the best that I have ever known. Last year I did not have one swarm from 90 colonies—this year they have swarmed all the time. They would commence swarming before breakfast, and keep it up until suppertime. I think that last winter and spring at least 50 per cent. of the bees in this section of country died. The amount of surplus honey per colony is not as good as were in hopes of getting this year. EDWIN RICE.

Chaffee, N. Y., Aug. 1, 1892.

Feeding Dry Sugar to Bees.

I notice on page 180 a statement by "Malta" that it is possible to feed dry sugar to bees successfully to keep them from starving, or for winter stores. I wish "Malta" would tell how to feed it in that way. Some of my bees need feeding now, and the weather is so warm. I abhor melting up sugar or candied honey. Feeding dry sugar would be a great boon, when necessary to feed.

THOS. A. ANDERSON.

Montgomery City, Mo., Aug. 8, 1892.

[Perhaps "Malta" will be kind enough to describe his manner of feeding dry sugar to bees, so that bee-keepers may take advantage of that manner of feeding whenever the bees are short of stores.—EDS.]

Small Loss in Wintering Bees.

I winter my bees in the one-story chaff hives, with a chaff cushion over the brood-frames, on the summer stands. I have quit feeding; I unite and double back until they will winter without feeding. I have lost 5 colonies in the past seven years, and that was caused by neglect. I make my own hives.

B. F. BEHELER.

Jumping Branch, W. Va., Aug. 8.

Not Much to Gather Honey From.

Bees have not done much this season in western Connecticut. The spring was backward, and there was no white clover, and not much basswood. The bees did not have much to gather honey from—the only thing to rely on is golden-rod and asters for winter stores. I shall get perhaps 100 pounds of comb honey in sections for the season.

H. H. KNAPP.

Danbury, Conn., Aug. 3, 1892.

Characteristics of Punic Bees.

I do not think it makes much difference to the honey producer whether there are one or a dozen varieties of bees in North Africa. I have only seen the bees from a Punic queen mated with a yellow drone, but they differ from Italians, blacks or hybrids of the same in their habits. They stand the changeable weather in spring much better. They work earlier in the morning, and are stronger and quicker on the wing. In swarming they fly straight to a tree and cluster at once, and if everything is ready they can be on the stand in the apiary in ten minutes from the time the first bee leaves the hive. Their guard at the entrance is small, but effective, even against the bee-moth.

The only objection I have to them is that (contrary to my expectations) their work in the sections is Italian, and does not compare favorably with the work of our other hybrids. I think it would be well to have the opinions of some who have Punics bees, and know they are pure. If our queen had mated with a black drone, I do not suppose we would have known the difference, and would likely have thought them pure.

WM. CLARK.

Pulaski, Ky., Aug. 4, 1892.

Will Store Enough for Winter.

I have 70 colonies of bees, spring count, all in good condition, with no increase and no honey to spare for this year. The weather is very dry, and they average a pound a day at this time; but I think they will store honey enough to last through the winter.

JOHN ROLLER.

Richwood, Wis., Aug. 10, 1892.

Bad and Short Season.

On June 8 I extracted 2 gallons of white clover honey, per double Langstroth hive. From June 9 we had daily rains to July 27, and up to that date bees gathered little or no surplus honey. We have had no rain the past five or six days, and now it looks as if the bees would store surplus honey. So far I consider the season bad and short.

P. E. COUVILLON.

Carencro, La., Aug. 2, 1892.

My Experience with Punic Bees.

I procured a Punic queen from Henry Alley last October, and introduced her to a small colony of common black California bees. In three days after the queen was introduced, I examined them, and found all the combs full of eggs, and by Dec. 1 they were a good-sized colony. I examined them on March 1, and found them full of brood sealed up. On April 1 they filled a hive containing 15 frames 12x12 inches. I then divided them, and the new hive now contains 13 frames 8½x17 inches full of brood and

honey. The old colony since April 1 has filled 17 frames 12x12 inches with new comb and brood, which I gave to other colonies, and they now have 15 frames full of honey and brood. My other colonies of common California bees have stored less than one-third as much honey to the colony of equal size as the Punic bees.

From my little experience with Punic bees, I consider them far superior to any other bees I have tried. There has been much said about Punic bees—for and against them—but if they are given a fair trial, their good qualities will win the favor of all good bee-keepers. They are quick and active, good workers and hardy, and build up to very strong colonies without swarming, if they have plenty of room. They build white comb, and the brood is very compact and regular. I am satisfied that all who will give the Punic bees a fair trial, will be pleased with them. IVAN N. MOORE.

Los Angeles, Calif., Aug. 3, 1892.

No Honey from Basswood.

Bees have been doing fairly well here this season. Basswood bloomed nicely. I have two nice basswood trees close to a pump where we get water; these trees blossomed out in good shape, but I never saw but one or two bees on the trees, and I think there has been but very little honey gathered from basswood. I have 25 colonies now in good condition. I sent to Illinois and got 2 frames of brood and bees the first of July, and put one frame in each hive, and now I have two good colonies from them.

MARK D. JUDKINS.

Osakis, Minn., Aug. 9, 1892.

Saving Combs from Moth, Etc.

Last fall I had 28 colonies of bees, and on June 1, 1892, I had but 17. Two died during the winter, and 9 spring dwindled. To save the combs from the moths, I put some of them in hives under the strongest colonies, and some I saved by leaving them exposed to the rain in one-story hives without covers. Others I tied together, and put in a barrel of water until the pollen was about all dissolved, then removed, and left in a warm place to dry. There is no danger from moths after the pollen is all out. I have combs lying out in the yard now, and not a sign of a worm in them. I also have a few combs put in a very warm place, and not a sign of a worm yet.

The honey crop will be very light in this locality. I have not heard of or seen a section of new honey this season. There was a good crop of white clover, but it was of short duration. Sweet clover is in full bloom, and the bees are busy on it when the weather permits.

JOSEPH MASON.

Wallace, Ills., Aug. 5, 1892.

Unfavorable Season for Bees.

We had March weather in February this year, and the consequence was that buds opened, or nearly so, and the bees began gathering pollen and bred up alarmingly fast. Then commenced the cold, wet weather, as was almost universal the forepart of the season. July 1 found the bees in a starving condition, and as a result fully 25 per cent., on an average, of the colonies died in this locality. There has been no surplus honey here, and only an exceptional swarm, so far as I know among the bee-keepers, and very little prospects of any. W. H. HEPLER.

Manhattan, Kans., Aug. 5, 1892.

About Half a Crop of Honey.

The honey season is now over. Bees have, in my immediate vicinity, gathered about 50 per cent. of a good crop. From other reports received I think the State report will be less than 35 per cent. of a full crop. Basswood did not yield as freely as it does some years. Swarming was very light—not over 30 per cent.; with 12 oolonies I had but one attempt at swarming, and only 3 increase thus far. Fall flowers may yield a little yet.

H. W. SCOTT.

Barre, Vt., Aug. 3, 1892.

Bee Journal Posters, printed in two colors, will be mailed free upon application. They may be used to advantage at Fairs over Bee and Honey Exhibits. We will send sample copies of the BEE JOURNAL to be used in connection with the Posters in securing subscribers. Write a week before the Fair, telling us where to send them. We would like to have a good agent at every Fair to be held this year. Here is a chance for a live man—or woman.

AMERICAN BEE JOURNAL

ESTABLISHED IN 1861 — OLDEST BEE PAPER IN AMERICA

PUBLISHED WEEKLY BY

GEORGE W. YORK & CO.,

At One Dollar a Year,

199 RANDOLPH ST., CHICAGO, ILLS.

TO CORRESPONDENTS.

The Bee Journal is sent to subscribers until an order is received by the publishers for its discontinuance, and all arrearages are paid.

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The Convention Hand-Book is very convenient at Bee-Conventions. It contains a Manual of Parliamentary Law and Rules of Order for Local Conventions; Constitution and By-Laws for a Local Society; Programme for a Convention, with subjects for discussion, and about 50 blank pages, to make notes upon. It is bound in cloth, and of the right size for the pocket. We will pre sent a copy for one new subscriber to the BEE JOURNAL, with $1.00.

An Apiary Register is a splendid book to have in an apiary, so as to know all about any colony of bees at a moment's notice. It devotes two pages to each colony. We will send one large enough for 50 colonies, for $1.00, post-paid; for 100 colonies, for $1.25; or for 200 colonies, for $1.50. After using it for one season, you would not do without it.

The Premiums which we give for securing new subscribers to the AMERICAN BEE JOURNAL, are intended as pay for *work done* in getting new names among your friends and acquaintances, and are not offered to those who send in *their own* names as new subscribers, unless such name or names form a part of a club of at least three subscribers.

A Binder for preserving the copies of the AMERICAN BEE JOURNAL as it arrives from week to week, is very convenient. You should have one, as it is so handy for reference from time to time. We mail it for only 50 cents, or will give it as a premium for two new subscribers, with $2.00.

When Talking About Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we offer some excellent premiums that you ought to take advantage of.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	*Club.*
The American Bee Journal.....	$1 00....	
and Gleanings in Bee-Culture....	2 00....	1 75
Bee-Keepers' Review.....	2 00....	1 75
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American Bee-Keeper.....	1 50....	1 40
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The 8 above-named papers	6 25....	5 25
and Langstroth Revised (Dadant)	2 40....	2 25
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American Garden	2 50....	2 00
Rural New Yorker	3 00....	2 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Almost Every Bee-Book that is now published we mention on the second page of this issue of the BEE JOURNAL. Look over the list and select what you want. For every new yearly subscriber that you secure for us at $1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apiarian knowledge among your friends.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

Premium to Every New Subscriber.—We will *give* to every new subscriber (with $1.00), for whom it is desired in place of getting any other premium we offer for work done, a copy of "RURAL LIFE"—a valuable pamphlet of over 100 pages, devoted to "Farm Topics, Live-Stock, Poultry, Bees, Fruits, Vegetables, Household, Home, and Miscellaneous Matter." Or we will send it, postpaid, for 25 cts. This is a rare chance for new subscribers to get some excellent reading for nothing—by sending $1.00 for one year's subscription to the BEE JOURNAL.

This Means You.—When ordering any of the books or articles which we offer clubbed with the BEE JOURNAL, or otherwise; or when sending anything intended for us, such as subscriptions to the BEE JOURNAL, or matter for publication, *be sure* to address everything to —**George W. York & Co.**, 199 Randolph St., Chicago, Ills.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket

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Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 197.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

HONEY AND BEESWAX MARKET.

CHICAGO, Aug. 13—No choice comb on the market. Some inquiries for new stock, with none to offer. A good articie would bring 15 @16c. Extracted is very scarce, and plenty of inquiry for same; it would bring 7@8c.
Beeswax—firm at 26@27c.; good demand.
J. A. LAMON, 44-46 S. Water St.

CHICAGO, Aug. 13.— Comb honey is dull and no demand. Selling finest grade white at 15c. With new crop prices will rule firmer. Extracted is scarce and in good demand at 7@7½c. Beeswax, selling at 26c.
S. T. FISH & CO., 189 S. Water St.

CHICAGO, Aug. 13.—New comb honey is offered at 15@16c. for best grades of white; dark, 10@13c., but sales are few, as the weather is hot, and fruit is used for the table. Extracted is selling at 6@7@8c., according to kind and quality. Beeswax, 23@26c.
R. A. BURNETT, 161 S. Water St.

NEW YORK, Aug. 13.—Extracted in good demand and fair supply. We quote: Southern per gallon, 65@75c.; orange bloom, 7@7½c. ℔ lb. Beeswax, 26@28c.
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., Aug. 13.—The old crop of comb honey is all cleaned up. First shipment of new comb honey this week, which we quote at 16c. for No. 1 1-lbs.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI. Aug. 13.—Demand is good for extracted at 5@8c. Ddemand is slow for comb honey, at 12@15c. for best white.
Beeswax is in slow demand, at 23@25c. for good to choice yellow.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, Aug. 13.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6@7c.; buckwheat, 5@5½c.; Southern, 65@75c per gal.; Calif., 6½@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c more per lb. for extra select.
CHAS. ISRAEL & BROS., 110 Hudson St.

ALBANY, N. Y., Aug. 13.—Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.
H. R. WRIGHT, 326-328 Broadway.

DETROIT, Aug. 13.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.
M. H. HUNT, Bell Branch, Mich.

NEW YORK, Aug. 13.—New comb and extracted honey is arriving in small quantities. Comb honey is in VERY light demand at 15@16c. for fancy white in one-pound sections. Extracted is selling at 6@8c. for white. Demand is limited. Comb honey we would advise keeping in the country until say about Aug. 25 to Sept. 1.
F. I. SAGE & SON, 183 Reade St.

SAN FRANCISCO, Aug. 13.—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax—24@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street.

BOSTON, Aug. 13.—Demand is light. White 1-lbs., 13@15c. No 2-lbs. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.
BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS. MINN., Aug. 13.—Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.
STEWART & ELLIOTT.

KANSAS CITY, Mo., Aug. 13.—Old honey is cleaned up, both extracted and comb. New crop will be in about July 10, here.
HAMBLIN & BEARSS, 514 Walnut St.

NEW YORK, Aug. 13.— Demand moderate, and supply reduced, with no more glassed 1-℔ nor paper cartons, 1-℔. We quote: Comb, 1-℔, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 120 Pearl St.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 229, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

We Club the AMERICAN BEE JOURNAL and the monthly "Illustrated Home Journal" one year for $1.35; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for $2.10.

The Honey-Bee; giving Its Natural History, Anatomy and Physiology. By T. W. Cowan, editor of the *British Bee Journal*, 72 figures, and 136 illustrations. $1.00. For sale at this office.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

ONE DOLLAR PER YEAR.

Club Rates.—Two copies, **$1.80**; 3 copies, **$2.50**; 4 copies, **$3.20**; 5 copies, **$3.75**. Mailed to any addresses.

THOMAS G. NEWMAN, } EDITORS.
GEORGE W. YORK, }

Vol. XXX. Aug. 25, 1892. No. 9.

EDITORIAL BUZZINGS.

The Man who fears to go his way alone,
But follows where the greater number tread,
Should hasten to his rest beneath a stone;
The great majority of the men are dead.
—Life.

A General Gathering of bee-keepers will occur on Sept. 8, 1892, at the Fair Grounds at Hamline, Minn. It will not be a regular convention, but held for the express purpose of giving the bee-keepers a chance to become acquainted with each other, as well as with the working of the State association; and above all, to make arrangements regarding their exhibit at the World's Fair next year. Mr. A. K. Cooper, editor of the *Bee-Keepers' Magazine* and Secretary of the Minnesota Bee-Keepers' Association, and Mr. J. P. West, the President, will be in attendance at Hamline.

On Pretty Good Terms.—Friend Hutchinson, of the *Bee-Keepers' Review*, always has some good suggestions to offer—a kind of "special topics" we presume. In his August number we find the following observation and hint:

The bee-keeping editors are all now on pretty good terms with one another. If there *is* one of them holding a "grudge" against another member of the fraternity, I'll tell him how to get his revenge, if he must have it. Let him keep perfectly still about it, but go quietly to work and so improve his own journal that it will "run out" the other fellow.

But we don't know of anybody that *we* want to "run out," though of course the item was not meant for us, as we have no "grudge" against anybody. If a brother editor has a "grudge" against us, we would advise him to "drop it," as holding on to it won't make him any happier, or us either. So far as we know, there is now perfect harmony among bee-editors, which is just as it should be.

Mrs. Stephen Berry, while out looking at her flowers recently, was stung on the right temple by a honey-bee. She went into the house and was immediately taken ill. Before a physician arrived, she died. Death occurred within thirty minutes of the time when she was stung. According to medical opinions the poison was implanted in an artery, and, entering directly into the circulation, quickly found its way to the heart. She was 35 years old.

The Boy in the following amusing anecdote seemed to feel much-abused:

"Why, Willie, why are you crying so?"
"Boo-hoo! Mamma won't let me have any sugar on my honey."

Great Britain, during the month of June, imported honey to the value of nearly $18,000.

Read S. F. & I. Trego's Advertisement.

Mr. John H. Larrabee, the Government experimenter in apiculture at the Michigan State Agricultural College, has been discontinued. This we learn from a letter written to Bro. Root by Prof. Cook, and published in *Gleanings* for Aug. 1, which reads thus:

DEAR MR. EDITOR:—I regret to write that our friend Larrabee has been discontinued in his position as experimenter in apiculture for the United States Government. The cause is, the large reduction ($10,000) of the appropriation by Congress to the Entomological Division of the Department of Agriculture. I think this a grave misfortune, as it seems to me that at least one person might be selected and kept for the purpose of aiding this pursuit. There are yet several thousand dollars to be expended in experimental work and research in entomology. I believe if bee-keepers would cry loud enough they would yet get the mere pittance of $1,000 annually. A. J. COOK.
Agricultural College, Mich., July 16.

Bro. Root follows the above letter with these paragraphs of very excellent editorial suggestions and fitting endorsement of the splendid work which Mr. Larrabee has done for apiculture during his short year of service as Government experimenter in apiculture. Read carefully what Bro. Root says, viz.:

We are thoroughly in accord with Prof. Cook's belief, that, if bee-keepers will cry loud enough, they will get the mere pittance of $1,000 annually. Mr. Larrabee is and has been a successful bee-keeper; and since he commenced experimental work at the college, for the Government, he has rendered *most excellent* service. It is indeed a grave misfortune. The bee-keepers of our land, unlike those of any other nation, have received little governmental aid, and to have this little cut off just when grand work was being and about to be done, is a little hard on our industry.

We hope every one of our subscribers will write at once to Prof. C. V. Riley and Jeremiah M. Rusk, Secretary of Agriculture, Washington, D. C., asking for the continuance of Mr. John H. Larrabee as apicultural experimenter, and that the appropriation of at least $1,000 be again granted for the support and maintenance of an apicultural station.

The Agricultural College of Michigan is eminently the place for such a station; and we hope that the authorities at Washington will reconsider the matter.

It would seem that it should not be necessary to more than even *hint* that bee-keepers desire the continuation of Mr. Larrabee in the position which he has filled with such entire satisfaction and great profit to the industry of bee-keeping, in order to have him re-instated in that position. It has come to a pretty pass, when such a Government as ours cannot afford the "mere pittance of $1,000" for the advancement of so promising a pursuit as bee-culture. We are loth to believe that the "powers that be" in Washington are so near-sighted or blinded as to be unable to see the great necessity for just the kind of work that Mr. Larrabee was performing for the "300,000 bee-keepers" of our country.

We most heartily "second the motion" made by Bro. Root, and would *urge* all the readers of the AMERICAN BEE JOURNAL to at once rush such a resounding "cry" into the ears of Prof. Riley and Secretary Rusk as shall cause them to heed the request, or from the very "roaring" of the bee-keepers *make them* cry—

"Enough! We yield to thee—
Take back thy Larrabee."

We certainly believe in petitioning for whatever is wanted, and when those in authority understand our needs, we feel sure they will respect our prayers and grant our desires. If ten or fifteen thousand letters urging the continuance of Mr. Larrabee at the Michigan Agricultural College, were to be sent to Washington within say two weeks, we have not the least doubt that our helpful "Larra-bee" would be "winging" his way back to the "hive" on the "old stand;" and the $1,000, or *more*, would follow him as fast as it is needed.

Let every one who reads these words, write *immediately* to Prof. C. V. Riley or Jeremiah M. Rusk, expressing their requests in such a *humming, honied*

style as shall remind the honorable Washington gentlemen of the sweetness of the labors of the "blessed bees," and shall cause them to *yield* to the entreaties of so deserving a cause.

LATER.—Since the foregoing was put in type, we have received *Gleanings* for Aug. 15, and we would call attention to what Rro. Root says further in regard to Mr. Larrabee's return to "his position as experimenter in apiculture:"

In our last issue, we announced that J. H. Larrabee had been discontinued from his position as experimenter in apiculture to the United States Government. It will be remembered that Prof. Cook requested bee-keepers to write to the Department, asking that Mr. Larrabee be retained. Besides sending a marked copy, we sent a personal letter, and have just received word from the Department this morning, informing us that the employment of Mr. Larrabee is quite out of the question, as the appropriation by Congress has been reduced from $27,500 to $17,500, and that the latter sum is insufficient to carry on the more legitimate work of the Division. Mr. Frank Benton, however, is retained on the force at present, so apiculture will not be entirely neglected.

From this, of course, it will now be useless to write to Washington asking for Mr. Larrabee's return. We are glad that Mr. Benton is to be retained, so that our pursuit will have at least one representative at "head-quarters." Mr. Benton will faithfully watch the interests of bee-keepers, as he is fully competent, and intensely devoted to the work.

Feeders and Feeding is to be the special topic of the September *Bee-Keepers' Review*. The July and August numbers were devoted to "Smoke and Smokers." Those two issues couldn't have been said to be "smokeless" or "smokerless;" so it was not entirely a "smokeless battle," even in a bee-periodical.

Don't Fail to read all of page 261.

Sugar-Honey in Germany.—It seems that a new enemy has arisen to deceive the over-credulous and annoy the producers of honest honey—this time, according to "reports," from "over the sea." We shouldn't wonder, however, upon a thorough investigation, that it will prove to be like many another statement—merely the foolish imaginings of a notoriety-seeking scribbler. Mr. W. M. Barnum wrote us as follows concerning the new would-be enemy of our pursuit, on Aug. 5, 1892, from Belmont, N. Y.:

FRIEND YORK:—You, and our old friend Newman, have done yeomanry service to the bee-keeping cause, in defending it from the spurious and dangerous attacks of the cranks and fools who dare, in the face of their better judgment (let us hope!) to send out to the world such ridiculous messages as the enclosed. They are nothing more than an attack upon apiculture—and an extremely dangerous one at that. The one I send you is far worse than the average, as it comes from one of the leading "plate companies" of the country (Century Press Co., Washington, Nashville, Albany, etc.), and is sent out this week to their hundreds of newspaper patrons. The assumption they make of the *possibility* to make a "perfect substitute," or artificial honey, should be counteracted or withdrawn without delay. Let the bee-keepers awake to the danger—financially and morally—of this subtle enemy.

Fraternally Yours,
W. M. BARNUM.

Here is the paragraph referred to by Mr. Barnum in the above letter:

A substitute for honey has been introduced in Germany under the name of "sugar-honey," and consists of inverted sugar, water, minute amounts of mineral substances and free acid. It has the characteristic taste and odor of bee-honey. An examination shows that the artificial product is both chemically and physically a perfect substitute for bee-honey. As the article can be produced at a lower price than honey, the only product left to the bee-grower is the beeswax.

What next! We are no sooner rid of the unfortunate and careless "manufactured comb honey" statements and

their baneful effects upon the pursuit of bee-keeping, than another even more dangerous and diabolical creature of some addle-brained scrawler for the press comes forward to fill the gap caused by the execution of its hydra-headed predecessor.

How indefinite is the wording of all such deceptive paragraphs as is this. Notice how it begins—"A substitute for honey has been introduced in Germany," etc. It does not say *where it originated* —*that* is left for the imagination of the reader, and of course every observing person would at once know that it could only have been born in the place where brains ought to be, but where unfortunately is material little more valuable than first-class sawdust.

We venture to say that the writer of that paragraph wouldn't know the "characteristic taste and odor of bee-honey" from the perfume of a decomposed skunk, or a good article of asafetida. "A perfect substitute for bee-honey!" *Who* examined it and pronounced it "both chemically and physically a perfect substitute," when, if the contemptible prevaricator is to be believed, it never saw a bee.

And then to think that the bees must forever and ever spend their time in making wax! What a grand and inspiring business—making combs to be melted into beeswax! Why, it wouldn't be a "honey-bee" any more, but a "wax-bee." Oh, what stuff! What foolishness!

It is a great pity that such exact lineal descendants of the original Ananias and Sapphira could not be treated with the same prompt and effective judgment as was visited upon their progenitors, as was recorded in the Sunday School lesson of Aug. 14. If only such immediate and impressive retribution could be invoked to-day upon our modern Ananiases, we should soon be relieved of the necessity of so frequently being compelled to notice the non-sensical effusions of the many who attempt to write upon subjects of which they know nothing.

No doubt that paragraph will be read by hundreds of thousands, while its contradiction will never be seen by one-tenth part of that number. You know "a lie never stops to put its hat on," but rushes right on, hatless, and almost headless, while truth follows at a snail-like pace.

All that bee-keepers can do is to give such vile creatures a "black eye" whenever they can do so, at the same time never ceasing to produce the very best article of honey that can be put up by the honest, hard-working little but "blessed—bees."

Reminds One of the Flood.—Mr. Henry Stewart, one of our regular advertisers writes thus about the AMERCIAN BEE JOURNAL as an advertising medium: "Judging from the way each mail is bringing in the inquiries, your readers must read the advertisements in your JOURNAL. The showers of cards and letters that are coming down upon this office, reminds one of the floods of a few weeks since—but I assure you they are far more appreciated." If you have anything you want to sell, the advice is—put an advertisement in the BEE JOURNAL.

John M. Rey, of East Saginaw, Mich., "is always up with the sun, and is a busy man, jovial, social, the boss bee-keeper of the valley, and conducts the 'Sweet Home Apiary.'" That is what the Saginaw *Trade Review* said of him in its issue for July, which contained a general "write up" of the principal business men of the town, and of course gave a good "send off" to our friend Rey. May his "Reys" increase!

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 261.

Stand for Extracted Honey.—On page 73 we gave an illustration of a stand for comb honey; on this page we present a stand for showing off extracted honey. It may suggest some ideas to our readers who are looking for something of the kind, either to be used at Fairs, or in local groceries.

EXTRACTED HONEY STAND.

The more attractive and novel the arrangement of honey placed before people, the greater will be the demand for honey. Pure liquid honey, or that in the comb, often needs but to be seen to secure customers and dispose of any quantity of it.

Kind Letters are still being received, and friendly press notices are being given, about the former and the present management of the old AMERICAN BEE JOURNAL. Again we wish to express our appreciation of such kindly and fraternal utterances. The following is from Rev. Stephen Roese, of Maiden Rock, Wis., dated July 28, 1892, one of the numerous correspondents who have often written for the BEE JOURNAL during the past few years:

It is with feelings of regret that we notice the change in the editorial and managing department of our "old reliable" AMERICAN BEE JOURNAL.

Thomas G. Newman, its former editor, is a man highly esteemed by all who know him. He labored hard for the interest and advancement of our common cause. His good-will, good deeds, and kind words will continue to live in the memory of all who know him. Since our own personal acquaintance, or correspondence, our business transactions, and all, were most agreeable and satisfactory. While we are wishing our dear old friend, in his retirement, a hearty farewell, with God's blessing and our best wishes on his pathway of life, we bid his successor a heartfelt welcome, with a good-will for his future success, and also a willingness, on our part, to lend a helping hand in whatever may be needed to make the "old reliable" what it aims to be—"the oldest, cheapest, and best bee-paper in the world."

Yours Very Respectfully,
STEPHEN ROESE.

Mr. Thos. Wm. Cowan, editor of the *British Bee Journal*, gives this friendly notice in his paper for July 7:

We regret to see that, owing to failing health, Mr. Thomas G. Newman has been obliged to retire from the proprietorship of the AMERICAN BEE JOURNAL. This he has sold to Mr. George W. York, who has been an assistant in editing and publishing it for eight years.

We have for so long a time known Mr. Newman, and have always had such friendly relations with him, that we cannot but feel regret that he has been obliged to relinquish the responsibility and anxiety of proprietorship. We are, however, pleased to see that Mr. Newman still remains one of the editors of the AMERICAN BEE JOURNAL, and we hope the time may be far distant when he severs his connection entirely. The AMERICAN BEE JOURNAL has been successfully conducted by him for nearly twenty years, and it has always held a leading position amongst bee-papers.

We wish Mr. York every success in his new undertaking, and hope that he will continue a worthy follower in the footsteps of Mr. Newman.

The Month of August.

CURTIS MAY

The field lies parched in thirst,
Hushed in languor and heat;
The rough, wild hedge bears on its edge
Its rose, pale-cheeked and sweet.

The hills in their tents of cloud
Through the doorways lean and look,
And under the bank where the weeds grow rank
Hums low the narrow brook.

The butterfly's soft wing
Flits past hollow and hill;
The shining bees like argosies
Sail trough air-seas deep and still.

The dragon-fly darts and dips
Where the pool has scooped its urn,
And like coals of fire strewn in marsh and mire
The red swamp-lilies burn.

—N. Y. Voice.

QUERIES AND REPLIES.

Weeds and Grass in the Apiary.

Query 833.—1. What would be the best material to keep the weeds and grass down in the apiary? 2. Would the ordinary water-lime or cement do, if put on pretty thick?—Iowa.

I don't know.—J. M. HAMBAUGH.

1. Salt. 2. Yes.—M. MAHIN.

I think common salt the best.—G. L. TINKER.

1. A lawn-mower. 2. Yes. — R. L. TAYLOR.

Yes; or sand, or coal ashes, or flat rocks.—DADANT & SON.

A good scythe in the hands of a good man.—G. M. DOOLITTLE.

1. Salt. 2. Yes, if well done, but it is expensive.—H. D. CUTTING.

1. Pull them out. 2. No; they will come through it.—MRS. J. N. HEATER.

1. Salt. Boiling water. A sickle. Ashes. Other things. 2. I should think so.—C. C. MILLER.

1. A scythe. Most of our bees are in pastures—the stock keep down the grass.—E. FRANCE.

1. A very thick layer of sawdust will do it; or (2) the cement, if put on thick enough.—J. P. H. BROWN.

1. A sharp scythe or lawn-mower. 2. It will "do," but I would not advise it. Too expensive.—EUGENE SECOR.

I have never tried lime or cement. A good, sharp scythe and lawn-mower are the tools for me.—C. H. DIBBERN.

1. I don't know. 2. I would not want a cemented yard. I prefer a grass yard, kept down the best I can.—G. W. DEMAREE.

1. I use salt, and find it answers the purpose well. I prefer a nicely-trimmed lawn, but my yard is small. 2. I don't know, having never tried it.—J. E. POND.

1. I use salt, or when that fails, muscular power with a good pair of lawn-shears, or a lawn-mower. 2. I do not know, as I never tried it.—MRS. JENNIE ATCHLEY.

Paving with brick would be preferable, but by placing your hives in straight rows, so that you can run a lawn mower, grass is not very objectionable.—MRS. L. HARRISON.

1. In my small apiary a lawn-mower and a sharp Bingham honey-knife work like a charm. 2. Yes, if mixed with sand and water. I use salt where I don't want anything to grow.—A. B. MASON.

2. I think so. I kept grass down in this way for some years. I now prefer a closely-mown lawn. It is so beautiful, and if kept closely mown in June and July, is very nice and convenient.—A. J. COOK.

Pieces of boards (old bee-hives) in front, and a short scythe, and plenty of tramping as you work your colonies, other places. Remember that green is the best color for the ground-work of your apiary, both for you and the bees. —JAMES HEDDON.

Yes, the water-lime or cement would do, if put on thick enough, but it is too expensive. Salt will kill vegetation. Sand, sawdust, or coal-ashes will keep down the grass or weeds, or you might use bricks or plank for the same purpose. But why go to such expense and trouble? Grass is very pleasant to the eye, and far preferable to anything else in the apiary. A lawn-mower will easily keep it in order. Then humanity as well as bees ought to be pleased.—EDITORS.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Bee-Culture in Agricultural Colleges.

C. L. BUCKMASTER.

Why should it require argument to prove that bee-culture ought to be established in our colleges of agriculture? Yet, after good reasons have been presented, many of the Boards of Curators turn a deaf ear to the petitions of the bee-keepers.

There seems to be two prominent reasons why experiment apiaries are not at once established when the college is founded, viz.:

1. There are so many branches to be provided for that the curators are very liable to overlook some. The Boards of Curators are generally composed of lawyers, doctors, preachers, bankers, and other professional men, while few farmers, and especially bee-keepers, receive the appointment.

2. Bee-keepers and bee-keeping associations do not do their duties along this line. They should put themselves in communication with the Dean of their College of Agriculture. They ought to besiege him with petitions that he may present them to the Board. He, by all means, should be invited to the meetings of the bee-associations, and be requested to read essays on the subject of bee-culture in connection with the farm economy.

The bee-associations of the State should often meet in the Agricultural College buildings, and visit the farms; thereby getting personally acquainted with the teachers of the institution. Fellow bee-keepers, turn your meetings from meetings of pleasure at some popular watering-place (where you will be robbed by some second-class hotel-keeper), into a meeting of business where you can enjoy the hospitality of the college town, and do something for the cause of practical education.

This is a day of practical education—the period of manual training schools. The hand is being taught to accompany the eye. Boys and girls are being taught to *do* as well as to *know*. This is the new education.

Now, I want to say there is nothing that is superior to hive-building to train the hand; and nothing surpasses the exhibition of the constructions and the economy of the busy bee that will so develop the growth of the human intellect.

The day of the old college curriculum has passed. The boy will no longer be required to read seven years of Latin and Greek before he is permitted to study science; but science will be taught in such a practical way, in the future, that it will train the mind, and at the same time store it with useful facts, which will enable the college graduate to at once battle with the difficulties of life. The time has now arrived when the scientifically educated mechanic, agriculturist, horticulturist, stock-raiser, manufacturer and miner are far ahead of the old-fashioned lawyer, preacher and doctor.

I want to say that we are now making a determined effort to have an experiment apiary established in connection with the Missouri College of Agriculture, with a practical bee-keeper as teacher; and if we can have the co-operation of the leading bee-keepers of our State, there will be no doubt of ou success.

Last spring, by the invitation of Dr Ed. D. Porter, Dean of our College of Agriculture, I gave six lectures on practical bee-culture to his class in agriculture. I found the subject very acceptable to the young ladies and young gentlemen; and they seemed anxious to prove the facts set forth in the lectures by experiments. Many expressed a desire to take a thorough course, and asked the Doctor that an experiment apiary might be established.

Columbia, Mo.

The Mismating of Queen-Bees.

JOHN D. A. FISHER.

Mr. Geo. W. Wheeler, some time ago in the AMERICAN BEE JOURNAL, wrote that if I would wait until this summer, I would have all sorts of mixtures and colors among the bees produced by my queen of this year's rearing. No prediction could have been truer, for all of my young queens, so far, have mismated except one, and I do not know that she is purely mated, although her bees are all finely marked.

Last year my young queens were purely mated except two, or at least I thought so, as they produced all finely-marked worker-bees. I was highly delighted at my success in getting so nearly all my young queens purely mated; but

this summer's success has tumbled me down below zero.

I tell you, I don't know. I don't understand this queen-mating business. I let bees rear all the drones they choose, and the drones had full liberty to fly, and there were multitudes of what I thought to be pure Italian drones flying in and around my bee-yard; and now, if it were not for the old queens in my yard that are pure, I would have a yard full of hybrid bees. There must have been a large congregation of my neighbor's black drones that had their regular meeting-place near my apiary all this season.

Mr. Wheeler will say, "Your queens were not all purely mated last year, and this year the black blood is cropping out." Now, I have some queen-bees that were three years old last year, and their daughters produced bees that were all well marked. This year the daughters of these same old queens produced hybrid bees. How does he reconcile that?

I am very much interested in this mating of queens, and am doing some hard thinking on this matter. I cannot yet agree with Mr. Wheeler that a pure and yellow Italian queen mated with a black drone will produce all well-marked worker-bees, although his predictions in my case came true to a dot.

I now believe that the place where the drones locate there congregating spot has something to do with this mating of queens. I don't know. Oh, how I do wish I did know. Won't some one be so kind as to tell me, in the columns of the "old reliable" AMERICAN BEE JOURNAL.

Woodside, N. C.

A Young Attorney's First Case.

A. C. TYRREL.

A number of years ago I had occasion to visit a new settlement in Tennessee, and while waiting for the person I wished to see, I followed a motley throng to the court-house in which a case of unusual interest was pending, at least to the parties directly interested.

The judge—a kindly disposed, well meaning old man—although not very well versed in Blackstone, had been elected by the people of his district not on account of his legal lore, but because he advocated certain principles then popular with the masses.

The attorney for the plaintiff—Adolphus Skinner, Esq.—had lately "hung out his shingle," and by dint of much persuasion and promising to divide with his client the amount of the judgment rendered against the defendant, succeeded in being retained as counsellor in the case.

The defendant's attorney was a stranger to the residents of the county, having been sent by the "National Bee-Keepers' Union" to defend the case!

The action was called for trial, and a jury impaneled after much whispering between the plaintiff and his attorney, those only being retained who had no opinion on this or any other subject, and without prejudice for or against either party—taking their word for it.

The plaintiff's attorney then arose with as much dignity as his small stature and calibre would admit, cast his eagle eye up to a spider's-web on the wall, and over the sleepy jurors, thrust his hand into his pocket for an enormous chunk of "pig-tail" tobacco (which he hastily crammed into his mouth), hemmed and hawed to clear his throat, and commenced to state his case in a falsetto voice, by saying that the defendant was a man of vicious and vulgar habits, and wholly unfit to be entrusted with the care, custody and control of bees in the young and growing city of Podunk; and that he expected to prove by his witnesses—men of a high degree of moral character and rectitude—that his client on or about the 15th day of July, 1888, received serious injuries by reason of the running at large of noxious insects owned and controlled by defendant.

Having proceeded thus far to his evident satisfaction, he suddenly lost his voice and thread of the argument, and, taking the petition, read a curious medley of synonyms, once very popular with lawyers, now but seldom (?) used. The following is a copy of the petition:

In the Superior Court in and for the County of Dhawalaghiri, State of Tennessee.

John S. Smith, Plaintiff.
vs.
Tom A. Jones, Defendant.
} *Petition.*

To said Honorable Court:

The plaintiff complains of the defendant, and for cause of action states and says:

1. That the defendant is a person formed, organized and existing for the

purpose of carrying on trade and business in the city of Podunk, and State of Tennessee, but not incorporated.

2. That on or about the 15th day of July, 1888, the defendant was the owner and in possession of lot 1, block 2, in the city of Podunk, as aforesaid; that he kept and owned a skep, colony, or stand of bees in said city and State, as aforesaid, of vicious, willful, vengeful, vindictive, venomous and unlawful disposition.

3. That at the time and times aforesaid, and prior thereto, and from thence until and at the time, period and date of the injury and damage to the plaintiff hereinafter mentioned, set forth and to be stated, the defendant well knew that said malignant, uncivil and discourteous bees were accustomed and ever ready with, or without provocation, to attack, bite, puncture and sting unoffending mankind, persons and things.

4. That on or about the 15th day of July, in the year of our Lord one thousand eight hundred and eighty-eight, as aforesaid, the said bees, or four-winged insects then and there being, in the daytime of said day, to-wit: About the hour of 4 o'clock p.m., on the corner of Mason and Dixon street, in said city and State, as aforesaid, about 15 feet from said corner of said streets, then and there being, unlawfully, wrongfully, feloniously, and of his or their deliberate and premeditated malice, did make an assault, with the intent then and there him the said defendant unlawfully, feloniously, nefariously, and of his, her, or their deliberate and premeditated malice, to kill, puncture, wound and murder, and that they, the said bees or insects, instigated, stirred up and encouraged by the said defendant, with certain deadly and fatal weapons, to-wit: With a certain sharp-pointed weapon or weapons to their abdomen attached, then and there had and held him the said defendant's bees by their next friend and owner thereof, in and upon the cheek of him the said plaintiff then and there unlawfully, wickedly, wilfully, purposely, feloniously, iniquitously and nefariously, and of their premeditated and deliberate malice, did strike, cut, thrust and puncture, with the intent aforesaid, one wound of the length of one inch, and of the depth of three inches, of which said dangerous and mortal wound, he, the said defendant from the 15th day of July, 1888, until this time, did languish, and languishing did live in mortal terror, anguish and bodily pain as aforesaid, and against the *peace* and *dignity* of this defendant herein.

5. At the time complained of, he, the plaintiff, caught, captured and imprisoned one of his assailants after his power for evil had been curtailed and cut off by reason of the deprivation of his said weapon or stinger when engaged in his unlawful and unholy act and deed as hereinbefore mentioned, and the same is hereto attached and marked "Exhibit B."

6. That on the 15th day of July, 1888, as aforesaid, while the defendant was the owner and proprietor of the bees herein complained of, said insects or bees did attack, chase, bite, worry, sting and puncture this plaintiff on his left cheek as aforesaid, and left a piece of sharp-pointed weapon or sting about six inches in length in his, said defendant's cheek, in consequence thereof and thereby, by said willful, malignant and vicious act, he, the said plaintiff, became sick, lame, indisposed, diseased, weak and morbid, and so continued for the space of three hours next following the aforesaid attack, and was prevented, hindered and kept by reason of his terrified, damaged and injured condition and state from attending to his lawful and legitimate business, and necessarily expended, paid out and contributed to one Dr. Mercer, M. D., the sum of $1.60 in endeavoring and trying to be cured of his said sickness, lameness, and prurient, itching disease to the damage of this plaintiff in the sum of $5,000.

Wherefore, plaintiff prays judgment against the defendant in the sum of $5,000, and interest thereon at 7 per cent. from the 15th day of July, 1888, and for such other and further relief and aid as justice and mercy may dictate and dispose.

(The jurat to this petition is omitted for want of time and space.)

Madison, Nebr.

(To be continued if necessary.)

Experience in Clipping Wings of Queens.

FRANK COVERDALE.

On account of being quite busy about my farm work the past spring, I thought to let my queens go unclipped, and chance that old-fashioned method just once.

In the last days of June, swarming was the order of the day, and of course I used a ladder and sharp knife, and an old-fashioned gunny-sack on a pole put

up to catch the cluster in. What inconvenient places some swarms would cluster in! I think most assuredly that no device could be invented to properly take these last-mentioned swarms from the trees. But up the ladder I went, then out on the limbs the rest of the way, and with the knife I sawed and cut, and when nearly two-thirds off, the limb cracked, which shook off some of the bees, and I finished cutting the limb down the ladder.

As I laid the cluster in front of a new hive, for awhile all seemed well, until I heard a rustling and hunting on the ground on the part of the bees which were about to cluster again at the top of the tree. I had failed to get the queen, and with mad bees flying around my head, and great drops of sweat falling from my brow, I stood gazing at the top of the tree, and I said to myself, "If I could only be forgiven of this evil, I would do so no more."

But no, there was no forgiveness, save that I yet might clip my queens' wings —a thing not at all easy to do after the section-cases are on the hives, which are rolling brimful of bees. However, I thought I would try, and while I was going towards the honey-house, it came quite fresh to my mind. Experience in hunting black queens had been no easy task, but with shears and Bingham smoker under fair puff, the task was at once begun.

I puffed in just a little smoke to cause the bees to stay back, and took one frame out all right, and the next frame was given a slight jar, and before I got through 30,000 bees all boiled out over the edges of the hive, and without finding the queen it was closed.

Then for the next, I got an extra hive to set the frames over, which seemed to somewhat help the matter. After that day, I declined hunting for any blacks.

The hives of my best Italians were then opened, the first having a Doolittle queen, and finding myself not disappointed, all went on finely as far as the Italian colonies lasted. Now, as the queens were half clipped (including some hybrid colonies), I determined, if possible, to finish the job again in a few days when it was quite warm, and in the afternoon, with honey coming in quite freely, the work was again begun, and I determined this time to go very gently, opening up the cover easily, and using a very small amount of smoke. I was then quiet for one minute, when with another slight puff of smoke the operation was continued. No jarring was done; large numbers of the bees were in the field, and frame by frame was examined, first on the one side, and then on the other, until 15 black queens were clipped, and every colony was treated in this easy and calm way.

Welton, Iowa.

The Season—So-Called Punic Bees.

C. P. M'KINNON.

Last winter I lost 4 colonies out of 50 in the cellar. I found some pollen-bearing flowers in bloom about April 1, and one nice, warm day in the evening I put the bees on the summer stands, mostly in good condition. The weather was fair, and I expected the bees would have a lively time the next day, but the wind changed, it turned cold, and rained, and hundreds of my bees were lost. It just kept on raining, and the bees were getting weaker, until 15 colonies were dead, and the rest very weak. (It rained 25 days in May.) The bees became so weak that it was impossible to get them ready for the harvest.

They bred up very rapidly during clover bloom, and commenced swarming during linden bloom. I saved 19 prime swarms, hived them on full combs, and they are now in good condition for the fall flow—if we have one. I will have 150 or 200 pounds of white honey in sections.

THE SO-CALLED PUNIC BEES.

Last fall I bought a virgin queen of the so-called Punic bees; she proved very prolific, and wintered well. They were the first bees to take in pollen, and bred up very fast, and were the first to swarm; but they have not the most honey. Some of my Italian hybrids are the first with the honey. The Punics are ahead of all the bees I have when it comes to stinging. They are the meanest bees to work with I ever saw. I intend to pinch the queen's head off and replace her with an Italian.

I see on page 138, that Mr. Cowan, editor of the *British Bee Journal*, has found that Punic is only a new name for Tunisian bees. I would like to ask if the Tunisian bees have been tried in this country, and what their characteristics are. Let others give their experience with the Punic bees—some of our leading bee-men—and if they are "no good," say so, and inform the bee-keepers of the country, that they may invest in something more profitable.

Bangor, Iowa, Aug. 8, 1892.

Great Increase from One Cuban Colony.

B. W. LAW.

My friends, Dr. Warner and Mr. Somerford have suggested to me that my experience in starting an apiary might be worth reporting. As an indication of the possibilities of bee-keeping here in Cuba, doubtless it is; but when I look back in the light of the experience gained, and see how much better I might have done, I do not feel that it is anything to be proud of. Summarized briefly, the increase from one colony had amounted, in 18 months, to over 30 colonies, and these had produced 7,240 pounds of honey.

Our friend Dr. Warner has an apiary, and my better half thought it would be nice to have a colony of bees up on our azotea (flat-tile roof), and I made no objection. The colony of bees came in December, 1890, the queen having begun laying Nov. 16. It was my wife's affair; but as she happened to be away the first time our friend came to open the hive and attend to the bees, I assisted and thought it rather interesting. I attended to them myself the next time, and my interest grew, and we thought we should make 5 colonies, Dr. Warner having explained to us how to increase by dividing.

Our experience (Mrs. L. got almost as deeply interested as I did) the next three months was doubtless very much that of most beginners. How cross the hybrids were! We got brood and cells from our friend's pure Italians, and were bound to have no other queens. By and by we forgot our limit of 5 colonies, and did not insist on purity of breed. We wanted *bees*, no matter what color. We got past the stage of gloves and armlets, and antidotes for stings, and concluded we would keep on until we had 20 hives.

In August we had 26 colonies, and the fever (bee, not yellow fever) became so strong that we came near giving up our visit to the States, for the sake of staying to take care of the bees. We did not give it up, however, and were away three months, leaving the bees to the care of our friend. He could not see them very frequently. A good many swarms went out; but when we returned in November, we found on our azotea 32 hives, mostly with upper stories. This was exactly one year from the time the first queen began laying.

We began extracting in December from 27 colonies, having lost one by accident, giving away two, and placed sections on two. The bellflower lasted only until about Jan. 6, giving 230 gallons. This usually lasts until a month later. Romerillo (*Bidens leucanthus*) following, soon gave about as much more. This honey candies—the only honey produced in Cuba which does not remain liquid, so far as I know. Fruit and other blossoms produced some further surplus, but continued rains prevented us from obtaining more than half the mangrove flow; besides, I had sold eight of my best colonies before it began.

My hives have nine frames 13¼x13¼ in brood-chamber, and eight above. I began with ten frames below, spaced according to rule, but found better results with one less. My location is very favorable in one respect. About three-quarters of a mile distant are molasses storehouses; and when everything else fails, the bees manage to scrape a living from the drainings of the hogsheads. This undoubtedly helped them through our two bad months, August and September. One circumstance, however, is unfavorable, and that is, our house is located on the edge of the bay, so that half of the area of the range is water.

The total amount of extracted honey was 7,025 pounds; comb honey, 215 pounds; wax, 70 pounds. Of the 27 colonies, about two-thirds were strong; but all gave surplus in upper stories. Since beginning to extract I have permitted no increase until now, not intending to keep on with the apiary. I now propose to increase to 100, and if I get as good results per colony next season, I will report again. One result I have still to mention—a fund of health and enjoyment from my work with the bees that I could have obtained here in no other way.—*Gleanings.*

Havana, Cuba, July 1, 1892.

Season of 1892—What I Have Learned.

G. W. DEMAREE.

I have written something under this head for some of the bee-periodicals each season for several years past. Some of the seasons have been a great success, and some have been poor in results.

The season just past has been the greatest failure in the way of a honey crop that I have had to speak of. We have had plenty of bloom, but the weather has been abnormal to a remarkable degree the entire season, from the

early spring to this date. Excessive rainfall, with cloudy, cool weather, with short intervals of excessive heat, characterized the season covering our early honey harvest.

What little honey we got was stored between June 15 and the 25th, and for several days during that short harvest the weather was so abnormally hot and sultry, that the bees deserted the brood-chambers and surplus cases, to hang on the sides and under parts of the hives. The temperature went up to 100° in the shade on June 23, 24 and 25, and there were terrific electric storms such as do not occur twice in an ordinary life-time. Under these conditions, what little honey we were able to take was injured in flavor, and is a poor article at best.

We have been told that the bees digest the nectar in their honey-sacs, and convert the raw nectar into the genuine article—honey. I never believed this monstrous theory for a moment. All my experience goes to show that good weather is essential to good honey; that all nectar handled by the bees must ferment slightly to *convert* the sugar it contains, in the process of curing; and if the weather chances to be the reverse of good—as it was in 1882, and now in 1892—the fermentation may go too far, and result in slightly sour, twanggy honey.

KENTUCKY WORLD'S FAIR HONEY EXHIBIT.

Kentucky, so far as my rather extended correspondence has informed me, has procured no comb honey worthy to represent our State at the World's Fair next year. We have only now to try and arrange with our State Agricultural Commissioners to make an exhibit of the next year's crop, during the latter part of the Fair. We can put of our early white honey, in position at the Fair, by July 15, or about two months before the Fair is closed.

UNFAVORABLE SEASON FOR EXPERIMENTS.

The season has been so utterly out of line with what we habitually expect to see, that I did not pursue my usual experiments this summer. To succeed with anything, I must feel a live interest in it, and as my bees could do nothing, I was powerless also to do anything with them.

But a poor season—a real failure of a season—is not without some advantages. If you can feel interest enough to observe closely, you may discover your *best* bees, and be able to improve your stock by breeding from the best next season.

My apiary is Italian—with half dozen colonies of Carniolans on trial—one colony of pure native black bees as a curiosity, and one colony of so-called Punic bees. It was a close fight against adversity between the best of my Italians and the best of the Carniolans. But I presume that the Carniolans have gained strength from the yellow blood that they have borrowed from the Italians.

The native black bees have, as usual, showed their weakness under adversity.

EXPERIENCE WITH THE PUNICS.

How about the little, black Tunisian bees? There is tender ground here, my friend, and we must speak tenderly. The latter part of last season I procured a Punic queen and introduced her to an Italian colony. She laid well, and reared plenty of bees for winter, and the colony was well stocked with bees in the early spring. Her bees were darker than any colony of native black bees I have seen, but were not "black," as they have been described.

A majority of persons who were shown this colony of bees, failed to discover any difference between their general appearance and that of some very black colonies of native bees; but when their attention was called to their inky appearance, they would readily admit that these bees might be distinguished from the native bees if one thought to make the discrimination.

In the early spring I was clipping the wings of some queens, and undertook to clip the black African—but I didn't. They were in some respects the most unmanageable colony of bees I ever tried to handle. They did not sting as viciously as some bees I have handled, but when the tops of the frames were uncovered, they would boil up and cover the tops of the frames, and spread out over the edges of the hive in a way that made handling of the frames a most unpleasant job. I could drive them with smoke, but they would rush back before I could set down the smoker and touch a frame.

The best I could do was to put on the surplus cases, and give them a wide berth. The result was, they gathered no surplus, but it is a fact that 25 per cent. of my Italians did no better this worst of all seasons. At the end of the season, I gave the colony an Italian queen, and this is the end of "Punics" in my apiary.

The prospects for fall honey are very good, and our bees must have this, or be fed.

Christiansburg, Ky., Aug. 15, 1892.

Growing the Basswood in California.

C. N. WILSON.

It would be a great thing for the bee-keepers of this Coast if some enterprising person or company would propagate basswood or linden timber in California in sufficient quantity to make one-piece sections as required by our bee-keepers. We do not know that any person has attempted the propagation of this timber on a large scale in this State. That the trees will grow well and grow quickly is beyond question, and we are quite certain it would be as profitable for timber culture as the blue-gum.

In our rich soil and warm climate the growth of trees goes steadily on throughout the year, and the basswood being a tree of rapid growth, it would soon mature so as to yield good material for one-piece sections; even small growths of it could be used to advantage, and as the tree has wonderful vitality, when cut sprouts come quickly and in great numbers from the roots, so that a basswood grove would soon spring up. We are of the opinion that many localities in the northern part of the State are adapted to the growth of this timber. The certainty that it would find a ready market at good prices ought to be sufficient inducement to start some enterprising person or company in the business.

As the matter stands we are entirely at the mercy of the Eastern manufacturers of one-piece sections. We are obliged to pay heavy freight rates on the railroad to get the sections, the charges amounting to more than the price paid for the sections at the factory.

The comb honey-producer of southern California is obliged to put his product on the market in as neat a package, and in as good shape as his Eastern competitor in order to secure good prices for his honey, and so far nothing has been found in California that is equal to basswood for one-pound sections. It is light and white, being entirely free from any gummy substance in its make up.

BASSWOOD FOR HONEY AND SHADE.

There is another reason why basswood should be propagated here, and that is its yield of nectar-producing bloom, affording a honey but little inferior to that gathered from our sages. It would doubtless bloom at a time of year that would completely fill the gap between the blooming of the sage and sumac, thus giving employment to the bee that would return large profits to the bee-master.

It is more than probable that basswood could be made to flourish wherever the sycamore or buttonwood will grow, and when once established would require no irrigation; though doubtless it would make a quicker and larger growth in locations where it would be supplied with water during the very warm weather.

The linden is a beautiful shade-tree, and could be used to advantage in our cities and villages by supplanting that villainous, good-for-nothing pepper-tree. Some of our Eastern cities, especially Washington, D. C., have some splendid specimens of linden shade-trees along the streets, and in the public squares and parks.

Whether the State Forestry has given the basswood or lindens a place in its experimental work, we are not informed, but it is worth the bee-keeper's while to investigate the subject and get what information he can from that quarter, not forgetting that a plentiful supply of young basswood or lindens can be had at very low rates from Eastern nurserymen. After the rainy season sets in is the best time to plant the young trees. Thousands of dollars can be saved to bee-keepers every year if the basswood can be successfully grown in any considerable portion of California. Give the basswood or linden a fair chance for life in California.—*Rural Californian.*

Convention Notices.

COLORADO.—The Colorado State Bee-Keepers' Association will hold their "Honey-Day" in Longmont, Colo., on Sept. 28th, 1892.
Littleton, Colo. H. KNIGHT, Sec.

PENNSYLVANIA.—The Susquehanna Co. Bee-Keepers' Association will hold their 11th annual meeting at Rush, Pa., on Thursday, Sept. 1, 1892, at 10 a.m. All are cordially invited. Bring along any new fixtures of interest that you may have. H. M. SEELEY, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

Read our great offer on page 261.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

Aug. 27.—Haldimand, at S. Cayuga, Ont.
E. C. Campbell, Sec., Cayuga, Ont.

Aug. 30, 31.—Iowa State, at DesMoines, Iowa.
J. W. Bittenbender, Sec., Knoxville, Iowa.

Sept. 1.—Susquehanna Co., at Rush, Pa.
H. M. Seeley, Sec., Harford, Pa.

Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.

Jan. 13, 14.—S.W.Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres.. Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

SELECTIONS FROM OUR LETTER BOX

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees are Doing Well.

I have 82 colonies of bees in good condition. Bees are doing well here this summer. The most of mine will store from 50 to 60 pounds of comb honey per colony this year.

THOMPSON KIRBY.

Ashley, Mich., Aug. 11, 1892.

Methods of Preventing Increase.

For the past two seasons I have followed the plan of the Dadants to prevent increase, viz.: To hive the new swarm beside the parent colony, and after 48 hours, at the same time giving more room by adding empty supers. This works fairly well, but is not a *sure* preventive of after-swarming, especially where one is running for comb honey.

I tried a new way this season, putting the newly-hived swarms into a dark, cool cellar, and leaving them there for 36 to 48 hours. They were perfectly quiet in the cellar, and went to work builidng comb, and I was surprised at the amount they made, and I found some honey stored in the new comb. When taken from the cellar and shaken in front of the parent colony, they marched in in a very cool and quiet manner, and there was no after-swarming in the 4 colonies so treated. I shall try the plan another season with all new swarms.

I have been using the Porter and Taylor bee-escapes the past two seasons, and shall have to give the preference to the Taylor, as it has never clogged or failed to do its work.

N. P. ASPINWALL.

Harrison, Minn., Aug. 11, 1892.

Have Done Nothing for a Week.

I began this season with 12 colonies, and increased them to 17 by natural swarming. I have taken only 40 pounds of honey so far. Bees have done nothing for a week. G. W. MCCONNELL.

Pembroke, N. H., Aug. 15, 1892.

Bee-Forage Drowned.

Bees did not do as well here last spring as formerly in March, but the other two crops promised a big yield, had not our levees broke and drowned all the forage for the balance of the season. I got, in March, 10 barrels of honey, each holding 50 gallons. E. STAHL.

Kenner, La., Aug. 7, 1892.

My Experience in Bee-Keeping.

I am a novice in bee-keeping, but was brought up in a "bee-yard" in West Virginia. I came to Kansas in 1880, but did not have a good chance to "try my hand" at bee-keeping until 1891, when I bought a stray swarm for $1, which a farmer found clustered on a sumac bush. Then a neighbor gave me one, which, in a short time, cast a swarm, and I then considered myself rich in the possession of 3 colonies.

Last fall I bought 13 colonies, 4 or 5 of which were in soap or cracker boxes. At the opening of the honey season I transferred them to 10-frame Langstroth hives, which are good enough for

me. I have had only two swarms this season—both from the same colony—one on May 27, and one on May 29. This was caused by taking the queen from an old colony, and introducing her into a queenless one, when the old colony went to rearing queens, as though everything depended upon how many they could rear. A few days later I found eight queen-cells on two frames, and it "wasn't much of a day for queens, either." I now have 18 colonies in fair condition, and storing some surplus honey.

This has been a very poor season in this section of the country, on account of the drouth, but we are getting some fine rains in the last few days, and hope for a good fall honey crop.

Where can I get some basswood trees? I would like to try them in Kansas.

DRONE.

Leonardville, Kans., Aug. 15, 1892.

[Those who have young basswood trees for sale would doubtless find purchasers by advertising in the BEE JOURNAL.—EDS.]

Worst Season in 13 Years.

The honey crop is a total failure here in northern Kentucky, as I only got 250 pounds from 165 strong colonies, spring count. Everything looked favorable for a big crop of honey. There was plenty of clover, and plenty of prospects, but no honey. It is the worst season in 13 years, or since I have been keeping bees. C. T. BIGGERS.

Minerva, Ky., Aug. 14, 1892.

Five-Banded Italian Bees.

I received two five-banded queens from Texas on May 15, and started them with three frames of brood and bees. They have filled two supers of the Root 8-frame dovetailed hive. One queen is on the third super. I had black bees right by the side of them, that have not 5 pounds. I tell you, "five-bands" are "Daisies."

C. V. MANN.

Riverton, Ills., July 15, 1892.

Meeting of the North American.

I notice what is said in regard to the meeting of the North American Bee-Keepers' Association. I think that September is too early for us Canadians. There are times when we can go from Suspension Bridge to Washington and return for $10. That would suit us.

I hope every reasonable effort will be made to get a large attendance, but do not let us ever get less money in the treasury than when Mr. C. P. Dadant resigned his position as Secretary. He worked hard, and would take nothing. I did a little, and refused to take what the Association kindly voted me. We wanted to raise the financial standing of the Association, and that should be one aim of every future Secretary.

I should like to see an able chairman—a resident of Chicago—elected to the Presidency, for the World's Exposition meeting. R. F. HOLTERMANN.

Brantford, Ont., Aug. 12, 1892.

Fair Season for Honey.

The season has been fair, though quite dry since June 1. The hive on scales from June 8 to July 21 gained 165 pounds in weight, after which there was a loss of about ½ pound per day. The best day (July 2) was a gain of 9 pounds, after 1⅜ inches of rain. My 71 colonies stored 4,000 pounds of honey, with an increase of 12 colonies. About ⅞ of the honey was extracted.

J. L. STRONG.

Clarinda, Iowa, Aug. 11, 1892.

Bees Did Real Well on Clover.

Bees, as a rule, have done but little here. As the spring was so cold and wet many died, and those that lived through were so weak that they gathered but little honey when the white clover came in bloom. But my bees have done real well, as my 38 colonies, spring count, have given me, of clover honey, extracted and comb, about 2,500 pounds, and I hope to get a fall crop from heart's-ease and yellow Spanish-needle. Bees have swarmed but little this season. JOHN HASKINS.

Douglas, Mo., Aug. 10, 1892.

Salting Bees—Poor Honey Seasons.

Last week I met an old friend—the AMERICAN BEE JOURNAL—the first copy I have seen since it passed under the new management. It contained an article (page 183) from my own pen, written for the *Bee-Keepers' Guide*, on the subject of salting bees. I could only repeat what I then said. Since then I have allowed my salting trough to go

dry, so that scarcely a bee could be seen about it; then I would pour water in it, and the bees were soon about it as thick as ever. To prevent bees from drowning, I have used chips, clover chaff, straw, boards with holes in them, and allowed to float on the water; but I have also tried corn-cobs, and like them best.

This part of the State has become so drouthy that there are few locations in which it will pay to keep bees, or at least to trust to bee-keeping as a business. For years I have been trying to find some part of the United States where skill and attention would give a fair honey crop every year; but so far I have not been able to find such a country. Here it hardly pays to keep even a few for table honey, much less for market. I do not think there are over one-fourth of the colonies kept that were here ten years ago. If the seasons do not improve, there will soon be no bees here except in a few river bottom situations.

I regret to be forced to say this, for there is no pursuit more congenial to my taste than bee-keeping.

Wm. Camm.

Murrayville, Ills., Aug. 9, 1892.

Lots of Honey from Buckwheat.

My bees have done very well this summer, and are now getting lots of honey from buckwheat. G. W. Bell.

Bell's Landing, Pa., Aug. 16, 1892.

Bee-Keeping Near San Francisco Bay.

This is the first year I have done anything among the bees for five or six years. Ours is not considered a good location for bees—it is too near the coast, being 3 miles from San Francisco Bay, and about 12 or 13 miles from the Pacific Ocean.

The finest part of our crop was partly extracted, when we received word that our brother Andrew was sick. He was, for a number of years, in the employ of the Government, in the Pension Department at Washington, D. C. After three weeks' sickness, he died on June 2. He was a young man of much promise, and would in all probability have made his mark in the world. His sickness and death was the cause of our doing nothing among the bees all through June and July. The fruit season was then over, and my two remaining brothers, who are the youngest members of the family, and yet school-boys, were given charge of a gang of boys, who were hired to harvest the fruit.

These brothers I speak of, are interested in the bees with me, and as I had newspaper work to attend to in the neighboring town, only about one-half of the hives were extracted from since June 1. We did not work for comb honey, though a couple of colonies gave us some very nice honey in the sections. In all, we obtained nearly a ton of extracted sweets, and there must be yet 500 pounds to throw out of the combs.

In looking through the hives recently to introduce queens, etc., I found that robber bees were exceedingly numerous. In fact, it was bad to open a hive, for the robber bees soon swarmed around.

W. A. Pryal.

North Temescal, Calif., Aug. 8, 1892.

COMBED AND EXTRACTED.

Some Extra Large Bees.

Mr. J. P. Murdock, of Florida, writes me that he has some extra large bees, so large that 13 of their worker-cells measure 3 inches, 7 drone-cells 2 inches, and more than half the bees fail to pass the ordinary perforated zinc. He says these bees are the result of selection in breeding from an Italian queen imported 11 years ago. He has sent me a copy of the Florida *Dispatch*, containing an account of his experience in getting these bees, and of his discovering their unusual size, and I make the following extract from the article:

"Last season all who saw my bees would remark, 'what big bees!' This occurred so often that I concluded to test the matter and see how well I had succeeded. So I sent to a number of our bee-men of the North a sample cage, and asked in return a similar favor. In the meantime I rigged up a balance, by which I could weigh to sixteenth grains. By this I found the heaviest dozens went a little more than 23 grains, and the lightest about 17 grains. Now, a dozen of mine went up to *thirty-eight and three-sixteenths grains*, more than *double* the size of some I received. Well, it set the parties who saw these big fellows to 'buzzing' at once, and all wanted to try them. The result is, I have at this

time a number of these queens North, trying to break the record on surplus. Just here I hear that fellow remark, 'another trick to sell queens.' Not quite, my dear sir. I have the first queen yet to sell for lucre."

I have sent for a queen, and expect to know something about these big bees by actual, personal experience.—W. Z. HUTCHINSON, in *Bee-Keepers' Review.*

Keeping Bees from Annoying at Fairs.

It will soon be time now to hold our county fairs; and at such times the bees and candy-men are liable to come in conflict. Every year, until last year, our bees fairly swarmed around the candy-stands. Although there was a dearth of honey, we managed to keep the bees at home from the last fair. On the morning of each day of the fair, we blew tobacco smoke into the entrances of every one of our colonies; this was repeated along about noon. The effect was to stupefy the bees, and to make them stay at home. As a further precaution we provided each of the candy-men with wire-cloth paddles, with wire-cloth in the centers, the wire-cloth being used to prevent the bees from being fanned away or to one side, in hitting at them on the wing. With these, every candy-man was to kill the first bee that came around; for we told them that every bee that went away loaded would bring back a dozen more. The effect of the tobacco smoke and the wire-cloth paddles was magical; and the casual observer would have said, standing around the candy-stands, that not a bee came around. At the previous fair, our bees made so much trouble that the candy-men threatened to sue us for damages, because the bees swarmed the stands so strong that people were afraid. We have mentioned this before, but it will bear repetition for the benefit of those who have bees located near fair grounds, and who should do everything in their power to prevent bees from being a nuisance.—*Gleanings.*

One Field of 100,000 Lilies.

This is a sight to be seen only on picturesque islands of the Bermudas. There these flowers are raised as a regular field crop. In value and in the esteem of the inhabitants they come next to the potato, though both are less esteemed than the onion, which is the staple crop of the islands. No more beautiful sight can be imagined than at this season of the year greets the eye of the traveler as he comes suddenly upon one of these fields, hundreds of yards square, and a mass of most fragrant white.

Unfortunately, the lily fields are not in the most profitable state. The beautiful bloom represents to its owners waste, for the lilies should be marketed in the form of buds. They are cut from the stems and packed in cases, 64 in a box, and sent by express all over the United States. If kept in a cool, dry place, the buds will remain without opening for several weeks, while by being placed in water they can be brought to perfection in a day or two; or, if the water is slightly warmed, in a few hours. This fortunate peculiarity of the lily has made it possible for it to be transported notwithstanding the long journey.

The culture was introduced only a few years ago upon the Bermudas by an American gentleman, Gen. Hastings. Some of the largest fields are still owned by this gentleman, and it is said that on one of them at any time in the season over 100,000 lilies may be seen in bloom at the same time.—*Buffalo Express.*

Bee Journal Posters, printed in two colors, will be mailed free upon application. They may be used to advantage at Fairs over Bee and Honey Exhibits. We will send sample copies of the BEE JOURNAL to be used in connection with the Posters in securing subscribers. Write a week before the Fair, telling us where to send them. We would like to have a good agent at every Fair to be held this year. Here is a chance for a live man—or woman.

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BEE JOURNAL

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At One Dollar a Year,

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The Convention Hand-Book is very convenient at Bee-Conventions. It contains a Manual of Parliamentary Law and Rules of Order for Local Conventions; Constitution and By-Laws for a Local Society; Programme for a Convention, with subjects for discussion, and about 50 blank pages, to make notes upon. It is bound in cloth, and of the right size for the pocket. We will pre sent a copy for one new subscriber to the BEE JOURNAL, with $1.00.

An Apiary Register is a splendid book to have in an apiary, so as to know all about any colony of bees at a moment's notice. It devotes two pages to each colony. We will send one large enough for 50 colonies, for $1.00, post-paid; for 100 colonies, for $1.25; or for 200 colonies, for $1.50. After using it for one season, you would not do without it.

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When Talking About Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we offer some excellent premiums that you ought to take advantage of.

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We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

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The Apiculturist	1 75	1 65
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American Bee-Keeper	1 50	1 40
Canadian Bee Journal	2 00	1 75
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Rural New Yorker	3 00	2 25

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Almost Every Bee-Book that is now published we mention on the second page of this issue of the BEE JOURNAL. Look over the list and select what you want. For every new yearly subscriber that you secure for us at $1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apiarian knowledge among your friends.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

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Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

WANTED—To sell or exchange for good, young Italian or Carniolan Queens, a good 3-frame Excelsior Honey Extractor, only run one year, and cost $12.50. It takes the Langstroth frame. Will sell it for $6.00, or exchange for good Golden Italian or Carniolan Queens, or for anything I can make use of.
THEODORE JAMES,
10 Montgomery St., NORTH ADAMS, MASS.

HONEY AND BEESWAX MARKET.

CHICAGO, Aug. 19—No choice comb on the market. Some inquiries for new stock, with none to offer. A good article would bring 15 @16c. Extracted is very scarce, and plenty of inquiry for same; it would bring 7@8c. Beeswax—firm at 26@27c.; good demand.
J. A. LAMON, 44-46 S. Water St.

CHICAGO, Aug. 22.—We have inquiries for white 1-lbs. comb honey, and quote it at 16c. for best grade; amber comb at 14c. Good demand for extracted, at 7@8c. Beeswax, 26c.
S. T. FISH & CO., 189 S. Water St.

CHICAGO, Aug. 19.—New comb honey is offered at 15@16c. for best grades of white; dark, 10@13c., but sales are few, as the weather is hot, and fruit is used for the table. Extracted is selling at 6@7@8c., according to kind and quality. Beeswax, 23@26c.
R. A. BURNETT, 161 S. Water St.

NEW YORK, Aug. 19.—Extracted in good demand and fair supply. We quote: Southern per gallon, 65@75c.; orange bloom, 7@7½c. ℔ lb. Beeswax, 26@28c.
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., Aug. 19.—The old crop of comb honey is all cleaned up. First shipment of new comb honey this week, which we quote at 16c. for No. 1 1-lbs.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, Aug. 19.—Demand is good for extracted at 5@8c. Ddemand is slow for comb honey, at 12@15c. for best white.
Beeswax is in slow demand, at 23@25c. for good to choice yellow.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, Aug. 19.—Demand for comb is very small. Considerable comb honey on the market, of 2nd grade, but no fancy of any account. Some demand for extracted, clover 6 @7c.; buckwheat, 5@5½c.; Southern, 65@75c per gal.; Calif., 6½@7c. per lb. Beeswax—a little easier, with supply to meet demand, at 25@27c.; 1 to 2c more per lb. for extra select.
CHAS. ISRAEL & BROS., 110 Hudson St.

ALBANY, N. Y., Aug. 19.—Demand is very little, and market quiet. We are selling some Florida new orange-blossom extracted honey to good advantage. Beeswax—28@30c.
H. R. WRIGHT, 326-328 Broadway.

DETROIT, Aug. 19.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7 @8c. Beeswax, 26@27c.
M. H. HUNT, Bell Branch, Mich.

NEW YORK, Aug. 19.—New comb and extracted honey is arriving in small quantities. Comb honey is in VERY light demand at 15@16c. for fancy white in one-pound sections. Extracted is selling at 6@8c. for white. Demand is limited. Comb honey we would advise keeping in the country until say about Aug. 25 to Sept. 1.
F. I. SAGE & SON, 183 Reade St.

SAN FRANCISCO, Aug. 19.—Demand quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax —24@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street.

BOSTON, Aug. 19.—Demand is light. White 1-lbs., 13@15c. No 2-lbs. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.
BLAKE & RIPLEY, 57 Chatham St.

MINNEAPOLIS, MINN., Aug. 19.—Market is dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15 @17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.
STEWART & ELLIOTT.

KANSAS CITY, Mo., Aug. 19.—Old honey is cleaned up, both extracted and comb. New crop will be in about July 10, here.
HAMBLIN & BEARSS, 514 Walnut St.

NEW YORK, Aug. 19.—Demand moderate, and supply reduced, with no more glassed 1-℔ nor paper cartons, 1-℔. We quote: Comb, 1-℔, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 120 Pearl St.

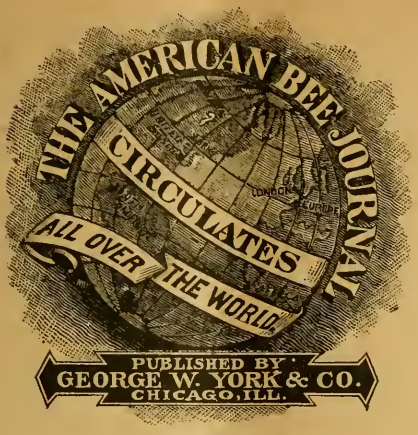
Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 261, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

We Club the AMERICAN BEE JOURNAL and the monthly "Illustrated Home Journal" one year for $1.35; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for $2.10.

The Honey-Bee; giving Its Natural History, Anatomy and Physiology. By T. W. Cowan, editor of the *British Bee Journal*, 72 figures, and 136 illustrations. $1.00. For sale at this office.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.



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Club Rates,—Two copies, **$1.80**; 3 copies, **$2.50**; 4 copies, **$3.20**; 5 copies, **$3.75**. Mailed to any addresses.

THOMAS G. NEWMAN, } EDITORS.
GEORGE W. YORK, }

Vol. XXX. Sept. 1, 1892. No. 10.

EDITORIAL BUZZINGS.

Seek Not to Walk by borrowed light,
But keep unto thine own;
Do what thou doest with thy might,
And trust thyself alone.
Work for some good—not idly lie
Within the human hive;
And though the outward man should die,
Keep thou the heart alive.

—ALICE CARY.

A Free Portrait of your favorite Presidential candidate is offered on page 293, in connection with the *Orange Judd Farmer* and the BEE JOURNAL. We have a set of these Portraits in our office, and can say that they are very fine indeed. They are 12x16 inches in size, and, as a picture, would ornament any home. The *Orange Judd Farmer* is an elegant, 16-page, weekly farm and home paper, and should be read by all who want to make a success of farm work, and also have a well-informed household.

The Honey Market.—It is safe to say that there is less honey now in the hands of producers as well as dealers and commission men, than at any time since 1877; the scarcity extends over the eastern, western and southern States. Excessive rains in some sections, drouths and cold, foggy weather in others have conspired to make the honey yield much less than usual, for this year, and last year the crop was much below the average. The markets throughout the United States are quite bare of either comb or extracted honey, and as present indications for a good yield of late honey are not favorable, home demand will require most if not all the honey now in sight, leaving nothing or very little of the commodity for export to foreign countries. A good article of honey is therefore likely to command a good price, regardless of the low price of sugar.—*Exchange.*

In Sunny Southland is the name of a new department which is begun on page 300 of this issue, and will be conducted by Mrs. Jennie Atchley. She will endeavor to make it an interesting and profitable feature of the BEE JOURNAL for those keeping bees in the "Sunny South," and it is hoped that their appreciation will be manifested by an increased number of readers from that "Paradise" of our country—for it indeed will be a Paradise for bees, when once it is fully developed apiculturally. Mrs. Atchley is a good writer, and knows, from practical experience, whatever ideas she transmits through her sharp pencil. We bespeak for her efforts a hearty appreciation, not only in the South, but all over our fair land, or wherever the BEE JOURNAL goes—and that is everywhere.

Why are cheap bargains like prisons? Because they're mostly "sells" (cells).

Read S. F. & I. Trego's Advertisement.

Work at Jackson Park has progressed considerably during the past two weeks. Except on the Manufacturer's Building, all the structural iron work was in place on Aug. 9, 1892. The Machinery Hall and Electricity Building are the only structures incomplete. Work on landscape gardening is now far advanced. Twenty-three State buildings are in progress. The Washington building will at once be commenced. Montana will probably be the first State building finished, for the interior work, as well as the exterior staff work, is already well advanced. The Turkish village on the Midway Plaisance will be immediately started. Work has been commenced on the building for Germany. The Government departments are being actively pushed forward. The main building is about finished, except around the base of the dome, while the battle-ship Illinois is now commencing to look something like a man-of-war, with its white covering of cement and smoke-stacks in place. Work has also been begun on the Government life-saving station.

Queens Mating from Upper Stories.—Mr. John McKeon, of Dryden, N. Y., on Aug. 12, 1892, wrote us as follows about his experience with a queen:

In the forepart of last month I had a swarm to issue from a 2-story hive that I was using for extracting, so I picked up the queen, and when the swarm was out I put the parent hive to one side, and put a hive with empty combs with a queen-excluder on top. I hived the swarm, and transferred the brood to the second story, and then transferred to the third story the surplus combs.

In about a week I cut out all the cells but one, and as that one seemed to be younger, I thought it best to leave it a day or two longer, and, besides, I could not use it just then. Well, I forgot about it, so when I did open the hive the queen had hatched. I looked for her, but did not find her at that time, and did not search any more. On Aug. 8th I opened that hive, and was surprised to find four combs well filled with brood in all stages. I found a fine, large yellow queen, and doing good work.

How did that queen become fertile? She had not been out of the hive.

It may be said that it was the old queen. No, sir; the old queen was in the bottom hive with a full sheet of excluder zinc on top, and with a clipped wing. The queen above was not clipped when I found her. I wish to say, also, that there was plenty of drones in the above hives. I have been taught that queens are only fertilized outside, and on the wing. I would be pleased to hear what Mr. Doolittle thinks of this case.

JOHN MCKEON.

Dryden, N. Y., Aug. 12, 1892.

The foregoing being referred to Mr. Doolittle, he replies thus:

Unbeknown to you, or otherwise, there was a crack or hole in or about one of those upper stories large enough for the queen to go out and return, to meet the drones, and was fertilized, without doubt, on the wing, as all queens are. This is the principle upon which the "Mating of Queens from Upper Stories," as given in my book, is founded. While under favorable circumstances the plan works successfully, as in this case, yet at other times and under other circumstances, it is an entire failure, the bees "balling" the young queens when two or three days old.

G. M. DOOLITTLE.

England seems to be ahead when it comes to encouraging bee-culture. It is reported that about $3,000 has been appropriated by the Government to provide free teaching in practical bee-keeping. And yet our United States—the wealthiest country on the Globe—cannot afford the "mere pittance of $1,000" for bee-culture!

Circulars for 1892 have been received from—

Henry Stewart, Wauzeka, Wis.—16 pages—Stewart Honey-Boxes and other Bee-Supplies.

Noah D. West, Middleburgh, N. Y.—4 pages—Spiral Wire Queen-Cell Protectors and Queen-Cages.

John A. Salzer Seed Co., La Crosse, Wis.—24 pages, with brilliantly-colored cover.

O. R. Coe, Windham, N. Y.—4 pages—Coe's Hotel in the Catskill Mountains.

The Nebraska State Bee-Keepers' Convention will be held in the Honey Hall on the State Fair Grounds at Lincoln, Nebr., on Sept. 7 and 8, 1892. It is desired that every bee-keeper of that State attend the meeting. The programme, as arranged, and published in the Nebraska *Bee-Keeper* for August, is as follows:

FIRST DAY—SEPT. 7.

Roll Call. Reports of Officers.
President's Address. Essays and Discussions.

SECOND DAY—SEPT. 8.

Election of Officers. Essays and Discussions.
The following essays and persons are announced:

Where Should We Market Our Surplus Honey?—E. Whitcomb.

Queen-Rearing—Chas. White.

Woman as a Bee-Keeper—Mrs. J. N. Heater.

Bee-Journalism—L. D. Stilson.

Nebraska and Iowa as Honey-Producing States—E. Kretchmer, of Red Oak, Iowa.

Bee-Keeping as an Avocation—Aug. E. Davidson.

Honey-Producing Plants—A. C. Tyrrel.

How to Begin Right in the Apiary—J. M. Carr.

Difficulties of a Beginner—W. F. Jenkins.

The Hive We Use, and Why We Use It—Discussion, led by Levering Bros.

Statistics of the Year—Secretary L. D. Stilson.

Hard to Please.—It is strange how differently constituted members of the human family are. A great variety may be found in the ranks of any pursuit. Some can see no good in anything, and find fault with everything. These kind of people work injury to an industry, and, while it may be impossible to change their natures, perhaps some of them, by reading the following anecdote, related by a certain Dr. Todd, will realize how ridiculous they appear:

Some people are always out of sorts. The weather is always just what they don't want. I met one of these men awhile ago, a farmer, who raised all manner of crops. It was a wet day, and I said:

"Mr. Nayling, this rain will be fine for your grass crop."

"Yes, perhaps; but it is bad for the corn, and will keep it back. I don't believe we shall have a crop."

A few days after this, when the sun was shining hot, I said:

"Fine day for your corn, sir."

"Yes, but its awful for the rye. Rye wants cold weather."

Again, on a cold morning, I met my neighbor, and said:

"This must be capital for your rye, Mr. Nayling."

"Yes, but it is the very worst weather for corn and grass. They want heat to bring them forward."

Prof. Chas. E. Bessey, of Lincoln, Nebr., we learn by the *Nebraska Bee-Keeper*, is getting up a display of the honey-plants of Nebraska, and desires the co-operation of bee-keepers. Those wishing to aid him in making the collection, will kindly send him a postal card asking for instructions. Other States should also undertake such a display, so that the whole country may be represented in what would be an interesting floral feature of the apiarian exhibit at the World's Fair next year.

Friend Hutchinson, editor of of the *Bee-Keepers' Review*, is "pictured" in the *Canadian Bee Journal* for Aug. 15. In the comments about the likeness (?) we find that it is called "a very spirited representation" of our brother editor. Quite true. It is so "spirited" that it might be taken for a "ghost" or "hobgoblin," were it not for the name under the picture. All joking aside, the *Canadian Bee Journal* has been much improved during the past few months.

It is Announced that the Postmaster-General of the United States has decided to issue a new series of postage stamps, with designs appropriate to the commemoration of the discovery of America.

'Twixt Sleep and Waking.

In the stillness o' the mornin', as I lie 'twixt sleep and waking,
I kin hear the lambs a' bleatin', an the rooster's 'rousin' crow,
The gobblin' o' the gobbler, the young calves' rav'nous bawlin',
The neighin' o' th' little colts, the milk cow's solemn low;
An' I see th' grass is green, an' there's blossoms on th' trees,
An' I hear th' hum o' bees as they gather honey there,
An' then, 'twixt sleep an' wakin', I jest feel a little homesick,
Altho' I tell th' fellows that I gin'rally don't eare. —New York Herald.

The World's Fair Buildings will be dedicated on Oct. 21st instead of the 12th, Congress having passed a bill to that effect. October 21st is the exact anniversary of Columbus' landing, allowance being made for the correction in the calendar made by Pope Gregory. The change of date of dedication was made in the interest of chronological accuracy, and also to oblige New York city, which will have a Columbian celebration on Oct. 12th.

The Minnesota Fair will be held at Hamline, Minn., on Sept. 5 to 10. Mr. J. P. West. of Hastings, President of the State Bee-Keepers' Association, is Superintendent of the department devoted to "Honey, Bees and Apiarian Supplies." Mr. M. Cutler, who has sent us a copy of the Premium List, and who is Chairman of the Executive Committee of the Minnesota State Bee-Keepers' Association, says this in a letter to us:

As many of our apiarists have a good crop of honey this season, and the premiums are very liberal, it is hoped that all will take an interest in the exhibit, and make it one of the best ever made in the Northwest.

Under the heading of the bee and honey department we find the following interesting information, which is quite novel in a premium list:

T. N.—Fruit is not injured by bees because a bee has no biter.

A bee's life is not measured by days and weeks, but by its activity.

We can be men and still humble be(es).

BEE SUPERSTITION.—A curious custom at one time prevailed in Buckinghamshire. At the death of the person who attended to the bees, a member of the family would go out in the evening and tap at every hive, repeating before each, "Bees, bees, your keeper is dead!" This is done to prevent the bees forsaking the hives.

The Premium List and "Rules Governing the Exhibit" are as follows:

Exhibitors must be residents of Minnesota.

All honey must be the product of bees owned by the exhibitor, and all articles for premiums in this division must be owned by the exhibitor.

A breach of these regulations, or of any rule of this Society, will forfeit all premiums that may be awarded.

No entries received after Sept. 3.

CLASS 64—HONEY.

	1st P.	2d P.	3d P.
Most attractive display of comb honey	$15	$10	$ 8
Most attractive display of extracted honey	15	10	8
Display of 20 lbs. comb honey, quality and manner of putting up for market considered	9	6	4
Display of 25 pounds extracted honey, quality and manner of putting up for market considered	9	6	4

CLASS 65—BEES, SUPPLIES, ETC.

Single nucleus of Italian bees	7	5
Single nucleus of black bees	7	5
Single nucleus of Syrian bees	7	5
Single nucleus of Carniolan bees	7	5
Collection of queens of different races	12	8
Most attractive display of beeswax	7	5
Specimen of beeswax, not less than 10 lbs., soft, bright, yellow wax to have preference	6	3
Honey vinegar, not less than one gallon, shown in glass	5	3
Assortment of honey candies	4	2
Display of apiarian supplies and implements	10	5
Largest and best variety of uses to which honey may be applied, illustrated by individual samples of the different things into which it enters as a component; for example, canned fruits, cakes, pastry, meats, vinegar, etc	15	8	5

GRAND SWEEPSTAKES.

Largest, best, most interesting, attractive, and instructive exhibition in this department, all things considered	25	15	10

The Total Value of honey imported into Great Britain during July, 1892, was nearly $63,000. We learn this from the *British Bee Journal* of Aug. 11.

The Chicago Fire.—The near approach of the World's Fair awakens increased interest in Chicago and her wonderful history. To-day Chicago is probably the finest city in the world architecturally, and all practically built within twenty years. The most thrilling and wonderful chapter in the city's history is the one telling of the great fire and the subsequent rebuilding. It reads like a tale from Fairy Land.

The new and magnificent "Cyclorama of the Chicago Fire" just opened in this city, shows in a most surprising manner the city *during* the great fire; with its thousands of acres of red-hot ruins, thousands more of a surging sea of flame, and countless thousands of panic-stricken people fleeing for their lives, it is the most grand, awe-inspiring, and realistic scene ever produced by man. The whole effect is greatly intensified by the introduction of novel mechanical and electrical devices, making the whole situation seem like reality. This remarkable exhibition is located on Michigan Avenue, near Madison Street, and will remain as a prominent attraction during the World's Fair. Our readers should make a note of this great work, and not fail to visit it.

We had the pleasure of viewing this matchless piece of art and nature combined, last week, and were simply amazed at the scene presented. We could almost imagine ourselves in Chicago on that "red-hot" Monday, Oct. 9, 1871—over 20 years ago. Ten famous artists, both in Europe and America, executed the splendid view. It would have required twenty years for one man to have alone performed the work necessary to put the picture in its present completed condition. It is viewed by thousands daily, and no one should leave Chicago without spending an hour looking at what a city of ruins this was a few years ago.

In order that the reader may form something like a correct idea of the magnitude and destructiveness of the greatest fire known to history, we give below a few figures to remember about the Chicago Fire:

Number of acres burned per hour, 125.
Number of buildings burned per hour, 1,000.
Number of people rendered homeless per hour, 6,000.
Value of property burned per hour, $12,000,000, or a million dollars every five minutes.
Loss, over $200,000,000.
People homeless, 100,000.
Number of lives lost, unknown.

If all the buildings burned in Chicago were placed end to end, it would make an unbroken row 150 miles long.

The painting was supplied to the Chicago Fire Cyclorama Company, by Messrs. Reed and Gross, of Chicago and Melbourne, Australia, the foremost men in the world for the production of works of this class. The contract has been fulfilled by them to the entire satisfaction of the Company, and to the surprise and delight of all beholders of this great work. The subject is the most difficult one that has ever been transferred to canvas, and altogether it is the most elaborate and expensive work of art ever attempted. Messrs. Reed and Gross received for their contract $250,000.

The paints used in making the Painting were all specially prepared and ground in poppy seed oil, and are probably the finest ever used upon a Cyclorama. Some of the colors cost from $5.00 to $30.00 per pound. Nearly two tons of paints and oils were required. The canvas is nearly 50 feet high, and about 400 feet long. Approximately 20,000 square feet of surface.

In a letter to the Cyclorama Company, Prof. David Swing—one of Chicago's popular preachers—who was here during the Fire, writes as follows:

Your artists have done wonders with the scene known as the Chicago Fire. I had little hope that any painters could do anything with so large a subject; but to those who saw the whole affair, your painting is true and really wonderful.

IN SUNNY SOUTHLAND.

CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Introductory Remarks.

FRIENDS:—Before taking up this work, I wish to say that I have been repeatedly urged to start a bee-paper, but, after due consideration, I concluded that it was best and safest not to do so. Having already been permitted "to ride" a little way upon "journalistic waters," I find that many times "the sea" is rough. Therefore, I have made arrangements to ride in one of the old, reliable, trustworthy and well-tried "boats"—the AMERICAN BEE JOURNAL—and I shall feel much safer there, than in a "new boat" of our own. And then, I had rather let Bro. York lose the sleep—don't you see?

Now, dear Southern bee-keeping friends, let us try to make our department interesting to all alike, and "know no North, no South," etc., but as we know where there is union there is strength, so with the best ability I have, I expect to give you bits of bee news and items of interest weekly, and with the help of our Southern bee-friends I trust we shall make our department a success.

JENNIE ATCHLEY.

Bee-Notes by the Way.

IF YOUR THINK that bees can't hear, just hold a frame before you, and hollow loud, and watch them "squat." You need not let your breath strike them, either.

DR. MILLER, in "Stray Straws," seems yet not to know why bees swarm. Why, Doctor, they swarm just because they want to.

I WONDER WHERE Bro. E. France is going to get $140 to pay rent on his 560 colonies of bees this year, as he gets no honey at all. Oh, well, I guess "where there's a will there's a way."

OUR NEXT WEEK'S SUBJECT will be about bee-caves in Texas, and mistaken ideas, etc. Southern bee-friends, give us your aid, and along with your articles send us some subscribers. Let us spread our AMERICAN BEE JOURNAL all over Texas and the South.

Hand-Picked Drones—Simp. Hives.

Mr. C. V. Mann, of Riverton, Ills., has asked me to answer the following questions:

1. What is meant by "hand-picked drones?"

2. Why do you prefer the Simplicity hive, and only 8 frames?

To the first question I would say that I mean by "hand-picked drones," just the same as hand-picked apples. When I wish to get the best looking ones, I go to my drone hives, lift out the frames, and with my hands I pick out the very *yellowest* drones, put them in a large cage, take them to the "mating yards," and place them in a nucleus. You see, the drones from any queen are not all marked just alike, hence I "hand-pick" for the best.

To the second question let me say that I use the Simplicity hive just because I like it best, and 8 frames are plenty for queen-rearing, besides being much lighter than the old 10-frame hive. Again, I find the majority perfer nuclei made of the Langstroth frame. I do not raise a "hive war" with any one, for I know that the hive does not cut as large a figure in the case of the bee-keeper, as does the one that operates the hive. Any good, movable-frame hive, not too large or too small, is all right; but, it is best to use a uniform frame.

Migratory Bee-Keeping, Etc.

I have learned that moving bees from one field to another does not pay here, as a rule, unless the flow is a failure, and you can get to where honey is more plentiful. What I am striking at is this: If you have a good flow of honey at home, for two or three weeks, then at once move to where the bees can have another two weeks' flow at once, it will not pay here, as the bees are so reduced that they are not sufficiently strong to gather much honey. But, should the bees have time to recuperate before moving, it will pay. Remember, that brood-rearing almost entirely stops here when we have a flow of honey, is why they reduce.

Dr. Miller asks this in his "Stray Straws" in *Gleanings:* "Do laying workers ever exist in a hive where you find sealed worker brood?" Yes, Doctor, lots of times.

Dr. Marshall's Early Bee-Keeping.

MRS. JENNIE ATCHLEY.—In your letter on page 148 of the BEE JOURNAL, you were mistaken as to the time I received the first queen brought to Texas. I had made arrangements to get a queen from Mr. Langstroth in 1861, but the war came on before I received it. In 1865 I ordered a queen, and received it in May, 1866. It came by express, and cost me in all $22. I now know it was by no means a first-class queen.

The next queen I received was an imported queen from Dadant, and the best queen I ever received. She was not a very bright color, but large, and all her workers clearly marked, and good workers.

I commenced bee-keeping in Texas in 1854. My first bee-keeping was in Indiana in 1839, and I have been at it ever since. When I gave it my full attention, it paid moderately well. I got the first Langstroth hive in 1865. I had used several hives of improved form before, but no movable frames.

The best honey year we have had in Texas was in 1860. The early part of the year was dry—no rain from February to August. Then we had plenty of rain, and everything took a second growth. The honey-dew was so abundant that it dropped from the hickory trees. My bees swarmed in September, and in a few days would fill the hive with comb.

When I commenced bee-keeping there were no books and no bee-papers; so very many of my facts were gathered by my own observation and experience. Long before the Langstroth frames, I had made bars like the top of the King frames, and by attaching comb I had straight combs made, and thus first was able to see the queen. Of course, the bees attached the combs to the side of the hive. I am now astonished that I did not see the necessity of side and bottom bars.

I am now, for the first time in 50 years, without bees, but I think I will get a few finest quality bees for company. I have tried Cyprians and Holy Land queens, and the Italians; and I have no hesitation in saying—taking them all in all—the pure Italians are the bees, best for all purposes.

W. K. MARSHALL.

Marshall, Tex., Aug. 11, 1892.

Be Sure to read offer on page 318.

QUERIES AND REPLIES.

Old Sections with Undrawn Starters.

Query 834.—Having a number of sections with starters in them, which the bees did not draw out, would it be advisable to use them, or put other starters in them?—Lucile.

Use them.—A. B. MASON.

Use them.—DADANT & SON.

Use them.—G. M. DOOLITTLE.

Use them.—MRS. L. HARRISON.

Use the old ones.—JAMES HEDDON.

I should use them.—R. L. TAYLOR.

Use them, if they are clean.—E. FRANCE.

Use the last year's sections as they are.—EUGENE SECOR.

If they are clean and bright, yes; otherwise, no.—J. M. HAMBAUGH.

If they are clean and firmly fastened, use them as they are.—MRS. J. N. HEATER.

You can use them to good advantage if the sections are not soiled.—H. D. CUTTING.

That comes on disputed ground. So far, I have used the old ones.—C. C. MILLER.

If the sections are clean, and the starters are not worm-eaten, I would use them.—J. P. H. BROWN.

You can steam the starters a little, and they will answer just as well as to use new ones.—J. E. POND.

Cut them out, if the foundation is at all soiled or propolized. If not, they may be used again.—C. H. DIBBERN.

If in good condition, soften a little by keeping them in a rather warm room, and use them. Why not?—A. J. COOK.

I have used such, and saw no difference between them and those that had starters of new foundation.—M. MAHIN.

I would use the old starters if not soiled too much. When finished, you cannot tell much if any difference.—MRS. JENNIE ATCHLEY.

If they are clean, I think they would be all right, but if soiled or hardened by exposure to sunlight, I would put in new.—G. L. TINKER.

I often use them with as good results as any. But it is best to not put them on until the weather gets warm, as the starters will be a little hardened by contact with the air so long.—G. W. DEMAREE.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Black or German Bees Compared.

G. M. DOOLITTLE.

During the forepart of this year there seemed to be more than the usual amount of discussion in the AMERICAN BEE JOURNAL relative to black bees, some claiming them superior to the Italians, while others considered them fully their equals, as to all the good qualities which go toward making the desired bee of the future.

In answer to Query 810, I see that the Dadants hint that these black bees may be as liable to sport as to color as are the Italians, and, if my memory serves me rightly, at the Albany convention, Mr. C. P. Dadant claimed that there were black bees in this country varying as much as to color as the Italians varied.

These claims remind me of the claims of several years ago, when it was said there was a great difference in the black or German race of bees, as to color, disposition, etc., some claiming that there was a little black bee that was nearly worthless, while from the same race of bees there could be obtained a large brown bee that was equal, if not superior to the Italian. Others claimed that, if we would have the best bees known to the world, we must procure the light gray bee; and still others were equally sure that the dark gray bee, of the same race, was far ahead of any other bee there was.

As I have always been anxious to have the best, I have tried all kinds that have ever been in the United States, except the Egyptians and Punics. In these trials I "took in" all of these different strains of the black or German bee, to see what there was in the different claims put forth for them, and how these bees—brown, gray, etc.—differed from the bees kept by our fathers; and I must say, without desire to hurt anybody's feelings, that I could not detect the slightest difference in any of them, or between them and the bees I formerly kept before I became acquainted with the Italians; and this is why I claim that these bees are a fixed or distinct race. They do not, with me, sport as to color, as do the Italians.

This sporting of the Italians, proves conclusively to my mind that this variety of bees came from an intermingling of races, for were it otherwise, why should they not be as constant as to color as are the German bees?

The last of the Germans I tried, was the large brown bee, claimed to be indigenous in Arkansas. As this queen came late, she did not lay any after she came that fall, so no young bees were reared until after they were put out of the cellar the next spring. In May, upon carefully comparing their color, actions, etc. (after there were plenty of these bees in the hive), with all the others which I had, I could not detect enough difference between them to be noticeable. However, in these close examinations, there was one thing which I did find that made me love the Italians better than ever, and which I wish to tell the readers of the AMERICAN BEE JOURNAL about.

Having tired of the "gray" bees which I had been experimenting with, I changed their queens at about the time I got the "brown" queen spoken of above, giving Italian queens to these colonies, and as they had not reared brood during the winter, less than one-fourth of the bees were young Italians in these cases, and about the same proportion of young black bees in the other case. When I opened the colonies where the young Italians were, they "stood their ground" on the combs, the same as all Italians will, while a little too much smoke, or a little jar, would set the black bees to running like a flock of sheep over these young yellow bees to such an extent as to nearly knock them off the comb; still they would not run or stir, only as they were carried with the multitude that was surging by.

To tell it just as it was, I had a feeling of pride come over me for the good behavior of these young, fuzzy little bees, which showed so much more bravery and steadfastness than their older companions.

Upon going to the colony where about one-fourth of the bees were young blacks, I found things just the reverse. Here the young bees would dodge about among the older Italians, run down to the bottom of the combs, and tumble off on the ground, or into the hive, according to where the comb was held; and when I came to the queen she was so nervous and fidgety that it was no pleasure to look at her; yet the older Italians "stood their ground," never seeming to care how badly their younger sisters and mother were frightened.

The pleasure with which Italians are handled is, alone, quite a large item in

their favor, which I had partly overlooked until I obtained these black bees for these experiments.

I am well aware that this trait of the black bees makes it easier to take the combs free of bees when working for extracted honey, yet I could not think of tolerating this "running nuisance" for the sake of getting them off the combs a little more easily, especially now that we have the bee-escapes, which largely do away with this shaking of bees off the combs.

In only one thing do the black bees excel the Italians, according to my experience, that is, they will cap their combs a little whiter than any other race or variety of bees with which I am acquainted; but they use much more wax in doing it, so that, while the combs look prettier, there is a loss in wax to nearly balance the looks.

The claim that they enter the surplus apartment more easily than any of the other races, has no weight with me, for, with my management, any of the varieties do not hesitate to go into the sections as soon as honey is to be had from the fields in sufficient quantity for practical work there.

Borodino, N. Y.

Honey Prospects and Marketing.

THOS. JOHNSON.

In answer to several inquiries regarding the prospects for honey, etc., I will say that I have written to several Eastern bee-keepers, and but few have answered, so I have taken for granted that silence means that they have no surplus honey. One man from Ohio says that he has no surplus, but expects to get enough honey for his bees to winter on.

After watching the reports from different sections of the country, I sum it up in this way:

Minnesota, Iowa and Northern Missouri had a white clover flow of honey, but not much linden and basswood. Bees worked two days in this locality on linden, then the south winds began to blow, and soon cooked the bloom until it did not furnish much nectar.

In regard to prices for white clover honey, I would say to those that have had the good luck to secure a first-class article, they need not be alarmed but that they will receive a good price for the same, because there is less quantity on the market this year than in 1891. If this is not true, then the reports which I have received through correspondence and through the different bee-papers are not true.

Some three weeks ago I took 144 sections of comb honey and three dozen 3-pound Mason jars of extracted honey to Guthrie Center, and they offered me 12½ cents a pound for comb honey, but they did not want extracted honey at any price. They said that they were buying at 12½ cents, and selling at 15 cents per pound.

I then made arrangements with a bakery firm to sell the 3-pound Mason jars at 50 cents each, and told them that if they could sell the comb honey at 18 cents per section, to sell it; and if not, to let it stand until fall, and then it would sell at 20 cents per pound.

Ten days after I left the honey, I was there, and I intended to bring it home, but lo, and behold! he had sold over 40 sections of the comb honey, and about half of the Mason jars of the extracted honey.

Now, the reader will like to know why my honey sells for 3 cents per pound more on the market than the honey of other bee-men. I will say that I first select the best and whitest sections that I can find for sale, and brand them with my own perfect brand, when the bees fill them with honey. On some cool morning I scrape all the propolis from them, and after I am through with my honey, they look as clean and neat as when I prepared them for the bees, except the nice, clean honey that adorns the inside of them. How often have I heard this expression made when I have been exhibiting the honey for the market: "That is the cleanest and whitest honey I ever saw!"

Now, fellow bee-keepers, it is just as easy to prepare your honey clean as to pack it in a haphazard shape, as many of the bee-keepers do in this part of the country, and I suppose all over the United States. I know very well a bee-keeper, who, for the last six years, has had no honey to speak of, and a few days before I took my honey to Guthrie Centre he brought his from the southern part of the county, but all he asked was 12½ cents. The groceryman told him that he would buy it, if he would clean the propolis from the sections, so at it he went, in the store. Think of it, the thermometer registering 90°, and an experienced apiarist in a grocery store cleaning sections of honey! If it had been down to about 50°, I think the groceryman would have had a nice lot of groceries to sell customers afterwards.

It is not surprising to me that such men as the one described "know it all;" and Dr. Miller's little book entitled "A Year Among the Bees," is of not much force to them. No; if they had read it, they would have known better than to have been scraping sections on a hot day.

Coon Rapids, Iowa, Aug. 13, 1892.

Bee-Feeding and Bee-Feeders.

W. Z. HUTCHINSON.

Why bees shall be fed, when they shall be fed, what they shall be fed, and how it shall be done, are all points that will bear discussion. There is no time of the year when bees *may* not need feeding to keep from starving. There is one time of the year when it *ought* never to be necessary to feed, and that is in the winter.

Modern bee-culture, with its small hives, reversible frames, divisible, interchangeable brood cases, contraction of the brood-nest, and honey extractors, has made it easy to rob the bees of their hard-earned stores, that it is often overdone, and then the act is followed by a neglect to furnish, by feeding sugar, enough stores to last the bees until they can again visit "the flowers that bloom in the spring." The man who is sufficiently acquainted with himself to understand his failings in this direction, ought to use large hives, and never take a drop of honey from the brood-chamber.

So seldom ought it to be necessary to feed bees in winter, that Bro. Hill, of the *Guide*, took me to task quite severely because I told in "Advanced Bee-Culture," how the work ought to be done when by some hook or crook the bees *had* gone into the cellar short of stores.

WINTER FEEDING OF BEES.

The best method of feeding bees in winter is to give them a frame of honey. If all of the honey is in the hives, look over all of the colonies, or a sufficient number of them to find combs of honey to give the starving colonies. It is well known that all colonies do not consume the same amount of stores, and the variation is so great that it often happens that enough combs of honey may be spared from those that have plenty to supply the needy.

If no honey is available, and some colonies *must* be fed, a candy made of granulated sugar is the best substitute. It may be caked in shallow dishes, and the thin cakes laid over the bees and covered with enameled cloth and two or three thicknesses of old carpet. Or the candy may be "run" directly into the frames, and the frames hung in the hives adjoining the clusters of bees. "Good" candy is also recommended for this purpose. Thin boards are tacked to one side of an empty brood-frame, thus forming a shallow tray. It is then filled with candy, and the other side covered with boards except a small space at the top, which is left for the bees to enter.

SPRING FEEDING OF BEES.

After the bees are placed upon the summer stands it is better that there be sufficient food in the combs so that feeding will not be necessary until settled warm weather has come. Right here is where I believe that bee-keepers have made their mistake in practicing stimulative spring feeding—they feed too early. All that the bees need is plenty of food already in the combs, and protection from extremes of temperature. Brood-rearing needs no encouragement at this stage of the programme. The vitality of the bees should be preserved and reserved until it can be used to the best advantage.

If brood-rearing is commenced in earnest in time to bring the colony up to its maximum strength at the beginning of the main honey harvest, it is better than to have it reach this pitch earlier in the season. After the season has advanced until warm, pleasant weather is the rule, and the first "brood" has hatched out, and the bees have commenced to boom, then is the time to *keep them booming* by protection and by feeding when there is not enough honey coming in to do this.

After brood-rearing has commenced in real earnest, there ought to be no check. On the contrary, it ought to go on increasing, reaching its maximum at the opening of the main harvest. Where the harvest comes early, and is of short duration, as is the case where it comes from clover alone, there is no hope of success unless the colonies are in prime condition at the opening of the harvest, and in all earnestness let me ask you, are there more potent agencies in bringing about this result than protection, and feeding when necessary?

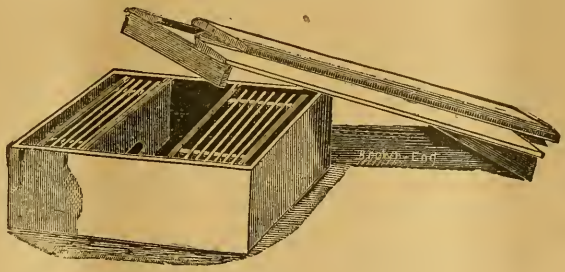
STYLE OF SPRING FEEDERS.

I am not sure what style of feeder is best for spring stimulative feeding. By the way, I do not like the word "stimu-

lative" as applied to this kind of feeding. I would feed simply to take the place of the natural honey-flow when the latter fails.

A feeder ought to possess the following points: It should allow the apiarist to learn if it needs filling without its being removed. It should allow of re-filling without coming in contact with the bees. It should not be accessible to robbers, nor attract their attention. I doubt if there is any advantage in a feeder that places the food in *close* contact with the cluster. If the weather is so cool, or the colony so weak in numbers that the bees will not leave the cluster to visit the feeder, I have my doubts as to the advisability of feeding.

The Heddon feeder is the first one that I ever saw that I thought enough of to make any use. It is exactly the size of the top of the hive, and the bees come up at the openings on either side.



THE "NEW HEDDON" FEEDER.

They pass over and down between the perpendicular slats, the upper edges of which are "bee-space" below the cover. The reservoir is in the center, and just over it a part of the cover slides back in grooves to allow the feeder to be filled. The inside partitions, next the reservoir, reach the cover, but do not *quite* reach the *bottom* of the feeder. This allows the feed to pass under the partitions and rise up between the thin slats. While this feeder is pre-eminently adapted for the feeding back of extracted honey to secure the completion of unfinished sections, or for feeding bees for winter, I know of no reason why it is not just as suitable for the spring feeding of which we are talking, as is any other feeder.

The Heddon feeder will answer as well as any for an open-air feeder; but, after giving this style of feeding a pretty fair trial upon several occasions, I cannot give it a very warm approval. In my apiary there were no other bees within range, but the difficulty is that if a spell of cool weather prevents the bees from flying, no food is brought in at a time when it is most needed. Besides this, the colonies that stand the most in need of feeding are quite apt to be the ones that take the least. With open-air feeding I have seen the combs of some colonies fill up, and white burr-combs appear on the tops of the frames, while other colonies would show scarcely a trace of any feed brought in.

The fact that honey contains nitrogenous matter would lead one to think that it would be the best food to give colonies that were heavily engaged in brood-rearing, but when there is an abundance of pollen in the hive, or being brought in, as is usually the case in this locality, sugar, at the present prices, is decidedly the kind of food.

More honey can be secured by giving the bees an abundance of room in the supers to the very end of the harvest. This results in a larger proportion of unfinished sections, but from the "feeding back" of about 16,000 pounds of extracted honey, I know that these sections can be finished up at a profit.

FALL FEEDING OF BEES.

Fall feeding, to give the bees an abundance for winter, is the next kind of feeding that demands attention, and for this purpose I think that nearly all will agree that sugar is the best food. Instead of trying to get a bounty on honey because there is one on sugar, let us try getting all of the honey possible from the bees, replacing it with the cheaper and safer sugar. Let us so manage the bees that the close of the season finds them destitute, because we have taken away the 10-cent honey, and it can be replaced with 3-cent syrup.

Let me digress here enough to say that most bee-keepers dread feeding,

because this part of bee-keeping has been given less attention than some of the other branches; they have not been educated to feed, and have not the proper arrangement for doing the work.

Most bee-keepers, when obliged to feed, make the syrup in small quantities, perhaps on the kitchen stove, and then do the feeding with anything that can be picked up. There must be some kind of a tank on a stove in the honey-house. This stove may be a wood-stove, or it may be gasolene or kerosene. I have always used the latter. The tank must be large enough to make a large quantity of feed at one time. The tank that I used held 100 pounds.

There must be a gate at the bottom to draw off the feed. To carry it to the hives, a large watering pot is a good thing. Then have feeders of such a style, and so arranged that it is only neccessary to walk along and slide back the covers and pour in the feed. The Heddon feeder will hold as much as 15 pounds. Two fillings would be sufficient to supply any colony with stores for winter. When feeding is made a *business*, and everything is properly arranged, it loses its annoying features, and becomes as pleasant as any apiarian work.

Sugar syrup for winter ought to be about the consistency of thin honey, and about one-fifth honey added to prevent granulation.

Feeding ought not to be delayed later than September. I have fed earlier than this, but found no advantage in so doing. If done in time for the bees to seal the stores, it is sufficient.

If feeding has been delayed until it is so cool weather that the bees are not inclined to leave the cluster, they may be fed by putting some rather hot feed in the feeder and setting it *under* the hive, when the heat from the feed will rouse up the bees and they will come down and take the feed; but feeding ought not to be neglected until this plan is necessary.

HOW MUCH HONEY TO FEED.

To know how much honey to feed, take enough combs from the hives to fill a hive. Extract the honey. Put them in an empty hive, and weigh all together. Add from 3 to 5 pounds for the bees. Weigh each colony, deduct the weight of hives and combs, and the remainder will show about how much honey is in the hives. For out-door wintering, I feed until there are 20 pounds in each hive; for in-doors, I give 15 pounds. Very large colonies might need more. Better have too much than too little.—*Bee-Keepers' Review.*

Flint, Mich.

The Honey-Bees of Ceylon.

W. W. LYON.

Here is what Sir Samuel Baker says about the honey-bee in his "Eight Years Wandering in Ceylon:"

VARIETIES OF CEYLON HONEY-BEES.

"The honey-bees are of four very distinct varieties, each of which forms its nest on a different principle. The largest and most extensive honey-gatherer is the 'bambera.' This is nearly as large as a hornet, and it forms its nest upon the bough of a tree, from which it hangs like a Cheshire cheese, being about the same thickness, but 5 or 6 inches greater in diameter.

"The honey of this bee is not so much esteemed as that from the smaller varieties, as the flavor partakes too strongly of the particular flower which the bee has frequented; thus, in different seasons, the honey varies in flavor, and is sometimes so highly aperient that it must be used with very much caution. This property is, of course, derived from the flower which the bee prefers at that particular season.

"The wax of the comb is the purest and whitest of any kind produced in Ceylon. So partial are these bees to particular flowers, that they migrate from place to place, at different periods, in quest of flowers which are then in bloom.

"This is a very wonderful and inexplicable arrangement of Nature, when it is considered that some flowers which particularly attract these migrations only blossom once in seven years. This is the case at Newera Ellia, where the nillho blossom induces such a general rush of this particular bee to the district, that the jungles are swarming with them in every direction, although during the six preceding years hardly a bee of the kind is to be met with.

"There are many varieties of the nillho. These vary from a tender dwarf-plant to the tall and heavy stem, to the common nillho, which is nearly as thick as a man's arm, and about 20 feet high.

"The next honey-gatherer is very similar in size and appearance to our

common hive-bee in England. This variety forms its nest in hollow trees, and in holes in rocks. Another bee, similar in appearance, but not more than half the size, suspends a most delicate comb to the twigs of a tree. This nest is no larger than an orange, but the honey of the two latter varieties is of the finest quality, and quite equal in flavor to the famed 'miel vert,' of the Isle de Burbon, although it has not the delicate green tint which is so much esteemed in the latter.

"The last of the Ceylon bees is the most tiny, although an equally industrious worker. It is a little smaller than our common house-fly, and builds its diminutive nest in the hollow of a tree, where the entrance to its mansion is a hole no larger than would be made by a lady's stiletto.

"It would be a natural supposition that so delicate an insect would produce a honey of corresponding purity, but, instead of the expected treasure, we find a thick, black, and rather pungent molasses."

Norris, Ills.

Arranging Honey in Store Windows.

EMMA WILSON.

I feel very much aggrieved, and my special grievance is with commission men this time. I wonder why they don't make their honey look a little more attractive. In passing down South Water Street, Chicago, I saw very little, if any, honey that looked very tempting. Perhaps I don't know very much about the circumstances, and it may be they were making the very best display they could with what they had on hand. It is very easy to find fault.

However, I know that one house might have done better, for they had some very nice honey up-stairs, while the display in the window was very poor. The room up-stairs was dark, and the honey could be seen only by scratching a match, or by the use of a lamp. The reason given for not having a better display down-stairs was, that they were expecting a very much nicer lot of honey in a few days, and were waiting for that.

It may be that it was a very inopportune time to visit. Perhaps they were all waiting, expecting something nicer. I hope so, I am sure. I hope they got it, too, and made their windows look so nice with it that people passing felt they wanted some of the honey right away.

I know that commission men have a great many obstacles to contend with, and not the least of these is a lack of room. With much of the honey seen, the fault was not with the commission men, as no amount of painstaking on their part could have made it look attractive. I only wondered if it was the best they had on hand. If so, the trouble was with the producers, and they were to blame for sending it to market in such shape, and ought not to complain if they did not get a good price for it, as much of it could not have gone any higher than fourth grade by either the Chicago or the Albany grading.

To be sure, some sections in some of the cases might have passed for first grade, if they had not been mixed with the others. Some cases shown were mostly nice, white honey, but several sections containing a good deal of pollen had been put in. There were other cases containing sections of beautiful white comb and honey, but a few of the sections were soiled, and a few containing honey-dew had been put in.

Now, the commission man was not to blame if he did not get a good price for that honey. Putting the bad in with the good did not bring the bad up to a higher grade, but did bring the good down to a lower grade, and the producer has no right to expect the commission man to assort his honey for him, putting it in the grade where it belongs. He must do that for himself, or be willing to take the lower price his honey will bring on account of the shape in which it is put up.

I must say my fingers fairly ached to have some good honey with which to arrange some of those windows, to make them look attractive. When we get our honey ready for market, we take a great deal of pains to pile it up to look nice just for our own gratification, although it is going to stay there only a few days, and its looking nice will make no difference in the price to us. Last year we piled the cases all around the sides of the honey-room, glass side facing us, and, when ready to ship, we had a room completely walled with honey; and unless you have tried it, you have no idea how nice it looked. Of course, commission men have not the same chance, as they have not sufficient room; but couldn't they do something toward it?—*Gleanings.*

Marengo, Ills.

The Season in Central Iowa.

O. B. BARROWS.

Unless we have a fall flow of honey, which has not come yet, this part of Iowa will have an exceedingly light crop of surplus honey. We had an exceedingly fine flow of white clover honey from about the middle of June until about July 23, and during that time two or three days of linden or basswood. Now, why is there not a large surplus? Because we did not have the bees to gather it.

To illustrate: I put 100 colonies of bees into the cellar the last of November, 1891, in excellent condition except having the so-called honey-dew to winter on. About Feb. 1, they became uneasy, showed signs of diarrhea—bad odor—and would crawl out and die on the cellar bottom, until about April 1 I put them out, and many of them were weak in numbers. The sun shone but one or two days in the week, and the bees would fly out and get chilled, and drop down and die.

I put the hives back into the cellar, with lots of honey in them, and when spring dwindling was over, I had 48 colonies left, but they were generally weak. By July 1 they built up and commenced swarming, and as I had the hives I let them swarm, and put them into those which had comb built and considerable honey.

Well, the white clover and basswood flows were both over by July 23, and I don't think I have over 800 pounds of surplus honey, while some years I have had over 5,000 pounds.

Jacob Moore, who lives four miles east, put 112 colonies into the cellar, and had 43 left, with a surplus now of perhaps 1,000 pounds, where he has had some seasons 8,000 pounds. Mr. Pinkerton may have a little over 1,000 pounds of comb and extracted honey, while one year he had 11,000 pounds.

Mr. J. W. Sanders lost nearly all of his bees, and does not expect any surplus honey.

My hives do not weigh quite as much to-day as they did on July 24, which shows that the white clover and linden bloom are over, and that the fall flow has not begun, and possibly may not begin this year. I am inclined to think that what is true of central Iowa will apply to the large part of the State.

This part of Iowa has not yet secured one-fourth of a crop of honey. This place (Marshalltown) has a population of about 10,000, with 12 or 15 groceries, and all the honey I have seen was what I sold one of them (about 40 pounds).

Farmers who keep a few bees have lost about all of them, and it is only a few who pay considerable attention to bee-keeping, that have any bees left. I see most of the bee-men living in this county, every few days, and hear from many outside of the county.

During the early part of the season I spend most of my time with my bees, and know whether they are gaining or losing in weight. I keep a record, and know my bees nearly as well as a farmer knows his horses or cattle as to pedigree.

We may get a fall flow of honey yet—it is what we are all looking for, but it has not begun yet. The colonies are slowly growing lighter in weight. Of course, some farmers may have half a dozen colonies near a buckwheat patch, that are gathering a little honey, but put 100 colonies near that same patch, and the honey gathered from it would not be perceptible.

Marshalltown, Iowa, Aug. 16, 1892.

Convention Notices.

COLORADO.—The Colorado State Bee-Keepers' Association will hold their "Honey-Day" in Longmont, Colo., on Sept. 28th, 1892.
Littleton, Colo. H. KNIGHT, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

Bee Journal Posters, printed in two colors, will be mailed free upon application. They may be used to advantage at Fairs over Bee and Honey Exhibits. We will send sample copies of the BEE JOURNAL to be used in connection with the Posters in securing subscribers. Write a week before the Fair, telling us where to send them. We would like to have a good agent at every Fair to be held this year. Here is a chance for a live man—or woman.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel,Wis.
Edwin Pike, Pres., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

A Glorious Honey Season.

We have had a glorious honey season here. I have taken 3,300 pounds so far from 46 colonies, spring count, and it is still coming. I have also increased my number of colonies to 100.

WALTER HARMER.
Chief, Mich., Aug. 24, 1892.

Good Honey Season So Far.

This has been a good honey season so far. There was the best crop of white clover in this part of the country that was ever known, and the bees stored surplus honey from the middle of June to the present time, excepting about three weeks that the weather was very dry; but we are having plenty of rain now, and the prospect for a good honey-flow this fall is very good. Last fall I had 7 colonies to winter, and lost 2, but they were weak in the fall. I have 12 strong colonies now. I winter my bees on the summer stands, and use the Langstroth hive. It was very wet here last spring, and so cold that the bees did not get to work any on the fruit bloom, but they made up for lost time on the white clover.

CHARLES SECKMAN.
Saltillo, Nebr., Aug. 22, 1892.

Good Crop from Clover and Basswood.

The Tennessee correspondent of the BEE JOURNAL that predicted a failure of the honey crop for the vicinity of Glenwood, Iowa, was away off. We have had a good crop from clover and basswood. The flow from fall flowers is just commencing, and the prospect is good.

E. W. PITZER.
Glenwood, Iowa, Aug. 22, 1892.

Bees and Honey-Plants in Nebraska.

My bees did well enough after the cold, wet weather, of which we had so much last spring. So far I find the rape the most profitable honey-plant that we can raise here. I did not get a plant of the Spider or Simpson honey-plant. I planted seed of both. The rape is the most sure to grow, as it is an oily seed, and grows fast. I think my third sowing will come to bloom in a week or so. The white clover dries up in dry weather, and on the alfalfa the bees have not worked yet. The Colorado folks claim that the bees work on it there, and store nice white honey from it. I have a nice patch of Russian sunflowers but my bees seem to care very little about it as long as they have rape or buckwheat to work on.

GOTTLIEB BALLMER.
Gothenburg, Nebr., Aug. 22, 1892.

Fine Honey-Flow—Styles of Hives.

We have had a fine honey-flow for the past 30 days, and our bees have made good use of the time. My colonies that were set aside for comb honey now average 60 pounds each, and those worked for extracted honey average 90 pounds. Our sumac began to bloom on July 20. It has given the bees all the work they could do, and it seems to be a favorite bloom among all the rest, as they left white clover and various other blooms, and all went for the sumac, which will last about ten days longer. Golden-rod is beginning to bloom, and is plentiful, though I have never seen a bee at work on it.

My regular style of hives are as fol-

lows: 17¼ inches by 14¼, and 10 inches deep, and take 11 frames, 12¾-x8½ inches. For experiment I have two that are shallower that take frames 12¾x6 inches. I find that the shallow hive is the best for comb honey. The bees go into the sections earlier than they do in the deep hives. I have two other hives with frames only 4¼ inches deep, with only 11 frames, that are giving more section honey than those 8½ inches deep. I have other styles for experimenting, and will give results later in the season.

W. M. SCRUGGS.

Tracy City, Tenn., Aug. 19, 1892.

Stored a Lot of Surplus Honey.

I have 5 colonies which are doing well, as are all the bees in this locality. They have stored quite a lot of surplus white clover honey, and heart's-ease has just commenced to bloom. I sowed 9 acres of buckwheat. All we need now is a good rain; then we will have a good fall crop. Bees are stronger than they were. JOHN H. RUPP.

Washington, Kans., Aug. 22, 1892.

Report of the Season So Far.

I lost 3 colonies of bees last winter, and started in the spring with 24. They have increased to 45, and have already given me a surplus of 700 pounds of honey, 200 of which is comb honey. I expect to take 300 or 400 pounds of comb honey yet, which is still on the hives, and I think it will be capped by the time frost comes.

S. LINDERSMITH.

Faribault, Minn., Aug. 19, 1892.

Crop Almost an Entire Failure.

We have almost had an entire failure in getting any honey this summer. It has been the worst year for bees in this part of the country that I ever experienced. So far I have taken about 16 pounds of honey. There has been so much rain, and it seems that my bees could not get much honey when we had fair weather. They gathered just about honey enough to keep them going, so I did not have to feed any to keep them alive. They gathered just about enough to keep the queens laying, and the bees are in good condition to catch the golden-rod bloom, which is beginning to bloom; and the asters, which will be in full bloom in a few weeks, I hope to get some surplus honey from those two flowers. If not, John D. A. Fisher, wife and babies will have no honey to sweeten there buckwheat cakes next winter. JOHN D. A. FISHER.

Woodside, N. C., Aug. 16, 1892.

Nice Honey from Raspberry.

I bought 16 colonies of black bees in box-hives, and transferred them to Quinby hives last spring. I put the sections on when the raspberry began to blossom, from which I got a nice lot of comb honey. I took 46 one-pound sections from each of my 3 best colonies, and it was nice. I will tally one for that plant. I took off the first honey on June 29, and have now taken off 466 pounds, with 644 sections still in the hives, and nearly all full. I am putting in frames to get some extra combs built for next spring's early feeding, to fill the hives with young bees for the raspberry flow of honey. I have had no swarms. From my best hive I have taken 98 sections, with 28 on yet. There are lots of bees around me, nearly all in box-hives, and they have not stored any honey, or swarmed much.

J. A. DELAMARTER.

East Meredith, N. Y., Aug. 13, 1892.

COMBED AND EXTRACTED.

Honey Marketing and Prices.

Many have advised to sell all our honey at home, and have nothing at all to do with those terrible "middlemen." Well, it is all right to sell all the honey we can at a fair price, to the neighbors, or to grocers in the nearest towns, but many of us are so situated that we cannot dispose of a great deal in that way, and it often happens that such parties will want to buy at prices far below market value. We have known people to sell their product for about one-half what it was worth, and then congratulate themselves that they had beaten the middleman out of his commission.

As to the time of marketing the surplus, we will say, don't be in any hurry, especially if you have fine goods to offer. Of course, it is best to sell as soon as we can, when we can get fair prices. In-

deed, we usually find the early market the best. Somehow, new honey in nice, clean sections, is a great attraction, and usually meets with ready sales. Owing to the great scarcity of fruit this year, we should insist on a good price, certainly not less than 17 cents per pound at wholesale. That is by no means high, as we have sold honey at 40 cents a pound years ago when wages were much lower than now. This price will certainly not make bee-keepers very rich soon, when we remember that it is the first honey of any consequence we have had for three years.

Then, if we commence selling our fine white honey at a low price, what can we expect to get for the late crop, that will be darker, and not so good? Better to put away a liberal allowance for the family, for the bee-keeper should have a supply for his family and for company at all times.

One point we want to make: When honey is sent to market, be sure that it is in nice shape, and packed so it will not get damaged. Scrape each section of all the propolis, and pack in neat, new cases. If you have a lot of the paper, such as the Dadants pack between their comb foundation, it is just the thing to wrap the sections of honey in. If the sections are thus wrapped, a shipping case will stand much more jarring and rough handling than otherwise, besides keeping out the dust, and showing that some care has been taken in preparing it for market.

Some have advised packing the sections upside down in the shipping cases, claiming that they will stand more rough handling than when packed as they stood on the hives. This is true, if not built down to the bottom; but the trouble from leaking, from the unsealed cells, greatly overbalances all the advantages, so we pack all right-side-up, and have but little complaint on account of breakage.—C. H. Dibbern, in *Plowman*

Moths Kept Out with Salt.

The best way to keep out moth is by the use of salt. Put in the salt as you put away your combs. Hold the combs in your left hand, take the right hand and throw it against the comb. Be sure and get it all over both sides, and put in a tight box and a dry place. It must be dry, or the salt may melt and injure the combs. When ready to use again, shake out the salt a little. Some salt won't harm your bees. I have tried many ways, and found it the best.

Of course if your combs are already filled with living moth, it will do very little good. This is only a prevention. Always have a double-story hive, bees can be better taken care of with a double-story hive. Keep your colonies to work as much as possible, by extracting or giving plenty of room, not too much at a time. Give it to them as they need it.—F. Henry, in the *Western Rural.*

Carniolan Bees a Dark Race.

Frank Benton, in a long article in the *Apiculturist*, admits that there are a few yellow bees in Carniola, but explains that they were brought in, by a system of migratory bee-keeping, from neighboring provinces. Mr. Benton says that he regards the Carniolans as a distinct and well established type—*one of the dark races*, and neither the history of bee-keeping in Carniola, nor his observations while traveling and residing there and breeding Carniolans extensively, would lead him to think that *pure* Carniolans were other than dark-colored bees. As I said a year or more ago, the so-called golden Carniolans get their color from the admixture of yellow blood.—*Bee-Keepers' Review.*

Uniting Small Colonies.

During an abundant flow of honey, those hives where little activity is manifest should be examined, and their condition ascertained. Open early in the morning or late in the evening, when but few bees are flying. A hive which has but few bees, and is queenless this month, is not worth saving; better take care of the comb to prevent its being destroyed by the larvæ of the bee-moth, and unite the bees with an after-swarm. Perform the operation as follows:

In early morning or late evening, remove all the combs but one or two, and confine these to one side of the hive by a division-board. Prepare another hive containing a like swarm in the same way. When the bees have become accustomed to the side of their hive, place the comb in the prepared hive, when the two swarms will soon communicate at the entrance, or across the division-board. The queenless bees will ascertain that their neighbors have a queen, and the other colony that their new tenants have honey. Friendly relations will be soon established, and a strong colony be the happy result.—Mrs. L. Harrison, in *Orange Judd Farmer.*

AMERICAN

ESTABLISHED IN 1861

OLDEST BEE PAPER IN AMERICA

BEE JOURNAL

PUBLISHED WEEKLY BY

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Almost Every Bee-Book that is now published we mention on the second page of this issue of the BEE JOURNAL. Look over the list and select what you want. For every new yearly subscriber that you secure for us at $1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apiarian knowledge among your friends.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

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Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, August 27th, 1892:

CHICAGO, ILLS. — We have inquiries for white 1-lbs. comb honey, and quote it at 16c. for best grade; amber comb at 14c. Good demand for extracted, at 7@8c. Beeswax, 26c.

CINCINNATI, OHIO.—The demand is good for extracted at 5@8c. Demand is slow for comb honey, at 12@15c. for best white.
Beeswax is in slow demand, at 23@25c. for good to choice yellow.

NEW YORK, N. Y.—Demand is moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.

DETROIT, MICH.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c.

SAN FRANCISCO, CALIF.—Demand is quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax—24@25c.

BOSTON, MASS. — Demand is light. White 1-lbs., 13@15c. No 2-lbs, on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all.

MINNEAPOLIS, MINN.—This Market is now dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c.

KANSAS CITY, MO.—Old honey is wholly cleaned up, both extracted and comb. New crop will be in about July 10, here.

ALBANY, NEW YORK.—No receipts of new comb yet, but some call for mixed at 13@14c. Light, 15@16c.; dark, 12@13c. Extracted is in good demand at 7@9c. Beeswax—26@30c. according to quality and style.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 318, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

List of Honey and Beeswax Dealers.

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S. T. FISH & CO., 189 South Water Street.
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CHAS. ISRAEL & BROS., 110 Hudson Street.

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C. F. MUTH & SON, cor. Freeman & Central avs.

San Francisco, Calif.
SCHACHT, LEMCKE & STEINER, 10 Drumm St.

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M. H. HUNT, Bell Branch, near Detroit.

Minneapolis, Minn.
STEWART & ELLIOTT, ——

Boston, Mass.
BLAKE & RIPLEY, 57 Chatham Street.

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H. R. WRIGHT, 326 & 328 Broadway.

Kansas City, Mo.
HAMBLIN & BEARSS, 514 Walnut Street.
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We Club the AMERICAN BEE JOURNAL and the monthly "Illustrated Home Journal" one year for $1.35; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for $2.10.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

When You Have any honey to sell, get some Honey Almanacs and scatter in your locality. They will sell it all in a very short time.

ONE DOLLAR PER YEAR.

Club Rates,—Two copies, **$1.80**; 3 copies, **$2.50**; 4 copies, **$3.20**; 5 copies, **$3.75**. Mailed to any addresses.

THOMAS G. NEWMAN, } EDITORS.
GEORGE W. YORK, }

Vol. XXX. Sept. 8, 1892. No. 11.

EDITORIAL BUZZINGS.

Father Langstroth is thus referred to by Dr. C. C. Miller in a "Straw" in *Gleanings:*

Have you sent to Father Langstroth the amount you promised? If you made no promise, it would be a nice thing anyhow to send something to him. We owe him much, and he ought not to lack in his few last years.

Address thus: Rev. L. L. Langstroth, 120 Ford St., Dayton, Ohio.

Mr. C. E. Mead, a bee-keeper in the city of Chicago, who has now 8 or 10 colonies, presented us with a fine sample of sweet clover comb honey, for which we say, "Thank you." Mr. Mead is 3 miles directly west of the Court House, and keeps his bees in the back yard. They do not disturb the neighbors, either.

Another Union for bee-keepers is proposed, to be organized for the special object of putting a stop to the nefarious practice of adulterating honey. This is a project that will command the earnest attention of every producer of honest honey, and also strike terror in the ranks of the diabolical adulterators.

Mr. J. F. McIntyre, in *Gleanings*, opens the subject of "another bee-keepers' union for the express purpose of fighting the adulteration of honey;" but we agree with Bro. Root, "that it *might* be more feasible to modify the constitution of the existing Bee-Keepers' Union so as to cover the objects" as stated by Mr. McIntyre. In a communication from Mr. Thomas G. Newman, the efficient General Manager of the present Bee-Keepers' Union referred to by Bro. Root, we are told how the new work could be embraced, and the constitution changed so as to permit of undertaking the prosecution of honey adulterators, as well as those who are foolish enough to think that they can have bee-keeping declared a nuisance.

Before saying more, we desire to urge all of our readers to peruse carefully the following from General Manager Newman, as he not only speaks of the glorious record of triumphant victories won by the National Bee-Keepers' Union, in its eight years of splendid work, but also makes some excellent suggestions relative to the subject under discussion:

To Members of the Bee-Keepers' Union:

In *Gleanings in Bee-Culture* for Aug. 15th, Mr. J. F. McIntyre suggests a matter of considerable importance for deliberation at the coming meeting of the North American Bee-Keepers' Association at Washington. He says:

I would urge all honest bee-keepers who meet in Washington next fall, to organize another bee-keepers' union for the express purpose of fighting the adulteration of honey. I believe such a union would soon have ten times the strength of our present one, because we are all interested in this matter, except

a few dishonest ones, and we will soon make it interesting for them. I have known for several years that a large proportion of the extracted honey sold in eastern cities was adulterated. This is why our dark honey sells for nearly as much as white—it will stand more glucose; and this is why the price does not go up in a poor year.

Personally, the Manager of the National Bee-Keepers' Union has waged war upon adulterators for many years, as is well-known to readers of bee-literature generally, but the Union was formed for quite another purpose, that of defending the rights of bee-keepers, when assailed by jealous or vindictive neighbors.

During the eight years of its existence the Union has gained victories to be proud of. It has compelled both judges and juries to render just and fair decisions in cases where bee-keeping was involved, and has won from the highest courts of the country decisions of law which will be pointed to as precedents as long as law and order shall endure.

Its history and achievements are too glorious to be ignored, even if a score of similar institutions are projected. It is also true that all bee-keepers are not alike personally interested in its objects, as Mr. McIntyre asserts, and therefore its membership is very limited. Mr Root makes these editorial comments upon the suggestion of Mr. McIntyre:

Whether it would be best to organize a new union having new functions we cannot say. It occurs to us that it *might* be more feasible to modify the constitution of the existing Bee-Keepers' Union so as to cover the objects above set forth. We have no doubt that every member of that organization would vote to have this change made, providing that General-Manager Newman should sanction it. It may not be best, however, to interfere with or enlarge the scope of an organization that has already done great good by the precedents in law which it has established in the interest of the bee-keeper.

Bro. Root is evidently mistaken about every member's vote depending upon my "sanction" of the scheme. It is true that my election, year after year, to the very important position of General Manager, in such a unanimous fashion, shows that I have the confidence of the members of the Union, and they have in this manner stamped with their approval the work I have done for the Union—but when it comes to the consideration of a new policy for the future, the members of the Union are fully competent to determine for themselves as to the expediency thereof, and I am fully persuaded that they will act for the permanent prosperity of the organization, without deference to my personal views or desires. I would thank Bro. Root for the compliment intended, and shall treat it as such.

In order to add this new feature to the National Bee-Keepers' Union, the Constitution must be amended; and, perhaps, the best way will be to have 10 members sign a request and send it to me, to have the proposed amendments submitted to vote. Then let the matter be fully discussed in all the bee-periodicals, so that the members may vote understandingly, after mature deliberation.

If it is voted to add the new feature, then the Washington convention can formulate plans to make an aggressive war upon adulteration and adulterators.

The greatest difficulty to be encountered will be the diversity in the laws of the several States. A National law should be enacted by Congress against adulteration, applicable alike to every State and Territory. Then something may be accomplished—until then, I fear much of the labor will be in vain.

Another trouble is that the honey from different localities varies so much in consequence of the diverse soils and atmospheric conditions. On that account even the analyzation of honey by chemists of National reputation is totally unreliable.

Another thing must be provided for—the new departure would require so much time and energy of the General

Manager that a salary should be attached to the office. I have done the best I could for the love of the pursuit alone, but it is hardly probable that my successor would accept the office on that condition, with that additional feature attached, to prosecute all honey adulterators.

Such a Union will require a young, energetic and persistent man, and he should be a good lawyer. None of "these essential qualities" will be found in the present General Manager, and therefore some other person must be elected to that important position.

Fraternally Yours,
THOMAS G. NEWMAN,
General Manager.

Chicago, Ills., Aug. 29, 1892.

The columns of the AMERICAN BEE JOURNAL are open for the fullest and freest discussion of this subject, which is fraught with so much that touches almost the very life of bee-keeping in any land. There will be ample time and opportunity to thoroughly consider every point involved, before the meeting of the North American convention at Washington. Bro. Root says further:

A union, such as Mr. McIntyre outlines, with competent, conscientious officers, it seems to us ought to secure easily a membership of not less than 1,000. With annual fees of $1.00 from each member, some telling and effective work could be done.

No doubt there will be plenty of opportunity for doing "telling and effective work" along the line indicated. We are almost inclined to believe that a good place to begin would be right here in Chicago. One man here has already offered to spend some time with the editor of the AMERICAN BEE JOURNAL, promising to show us something in the line of adulteration that would open our eyes. Now, what we want is a good "union" that will just "go for" those practicing adulteration, in such a way as shall compel them to *cease* their iniquitous work.

There is no doubt that the adulteration of extracted honey is what has kept down the price of the pure article. With glucose at 1½ cents per pound, it has been an unequal battle between the producer of honest honey and the maker of dishonest mixtures; and when a good, square dose of anti-adulteration law is once administered to the human hyenas, we rather think there will be such a "shaking up of the dry bones" in the devil's household as shall surprise old Satan himself.

Re-organize the Union, then pulverize the rascals that won't recognize the law!

G. W. Y.

James S. Judd, son of the popular and widely-known Mr. Orange Judd, has been installed as "business manager" of the Orange Judd Farmer Company. He is a young man—30 years of age—full of vigor and "get there" qualities, and will "manage" the business of the deservedly famous *Orange Judd Farmer*, with ability and success. Our esteemed friend and editor of the paper, Mr. Orange Judd, is now 70 years old, and takes solid comfort in the thought of being thus relieved in the labors of his great publishing interests. We will have more to say of Orange Judd and his life work next week.

The Homestead Troubles are discussed with fearless vigor and candor by Edwin D. Mead, the eminent publicist and lecturer, in the September *New England Magazine.* He deals with homestead and the press, the pulpit and the politicians, and comes to the conclusion that it will be a bad day for the American Republic if the masses of working men ever come to believe that the State stands behind our millionnaire barons, ready to crush those whom they would crush into obedience. It is an article that all real thinkers, especially among wage-earners, will read with interest.

Read S. F. & I. Trego's Advertisement.

Thirty-Five of the Forty-Nine States and Territories in the Union have accepted the building sites assigned them on the Exposition Grounds, and have submitted to the construction bureau for approval the plans of the buildings they propose to erect. Nearly all the others, it is known, are about ready to take like action. Every state and Territory, with perhaps three exceptions, will erect a building. Quite a number of these buildings will be reproductions of historic structures, such as Independence Hall, Washington's Mt. Vernon home, old Fort Marion, etc. They will occupy the northern portion of the Exposition Grounds, and will be surrounded by walks, lawns, shrubbery and flowers. They will be used as headquarters for State boards and visitors, and as receptacles for exhibits showing State resources, etc.

The Knox County Fair will be held at Vincennes, Ind., on Oct. 10th to 15th, 1892. In the Premium List we find the following liberal premiums offered in the "Apiary Department:"

	1st.	2d.
Best colony of Italian bees in one frame observatory hive	$5	$2
Best colony of Cyprian bees in one frame observatory hive	5	2
Best colony of Syrian or Holy Land bees in one frame observatory hive	5	2
Best colony of Punic bees in one frame observatory hive	5	2
Best colony of Native bees in one frame observatory hive	5	2
Best and largest display of different races of bees in observatory	5	2
Best and largest collection of queen-bees alive	5	2
Best and largest number of queen-cells on one frame as actually built by bees, shown with bees in observatory hive, cells to be alive at time of entry	5	2

NOTE.—In awarding the premiums on the different entries of bees, the qualities of queens and bees to be considered. The bees and queen-cells must all be shown in observatory hives with glass on both sides, and so arranged that both sides of the comb can easily be seen.

Best comb honey, white clover or linden, not less than 24 lbs.	$5	$2
Best comb honey, fall flowers, not less than 24 lbs	5	2
Best and largest display of comb honey	20	10
Best extracted honey, white clover or linden, not less than 24 lbs.	5	2
Best extracted honey, fall flowers not less than 24 lbs	5	2
Best and largest display of extracted honey	20	10
Best beeswax, not less than 10 lbs.	4	2

Best and largest display of apiarian implements—1st, $20; 2d, $10; 3d, $5.

NOTE.—In awarding the premiums on the different entries of honey, the committee will give equal consideration to the quality of the honey, and to the style of the packages in which it is exhibited, as regards looks and desirableness for purposes of marketing.

One-Cent Postage Stamps are preferred by us when it is necessary for any of our subscribers to send stamps in place of paper money, Express or Post-office Money Orders, or drafts on New York or Chicago. The Express Money Orders, or Post-office Money Orders, are the safest outside of drafts. Do not send checks on your local banks, as it costs us 25 cents each to get them cashed here. Postal Notes are no safer than cash put into the envelope, so do not waste your money in buying them, but get a Money Order instead.

An Excellent Paint for hives is made by mixing raw linseed oil with equal parts of zinc, white lead, and French ocher. The combining of these forms a smooth, durable surface that will not peel or rub off. The color is nearly white. So says a friend.

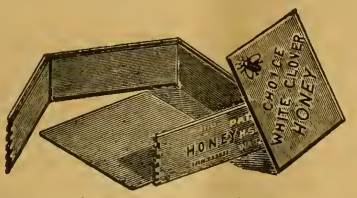
A Bee-Keepers' Association was organized at a picnic held at Whiting, Kans., on Aug. 27th, with F. M. Green as President, and Jacob Hixon as Secretary and Treasurer. The BEE JOURNAL wishes it a successful career.

The Stewart Honey Box is one of the latest inventions, by Mr. Henry Stewart, one of our old subscribers. When he showed us several sample boxes we were at once surprised and pleased. It is a very ingenious thing, and seems to be destined to revolutionize the putting up of either comb or extracted honey for the market.

We present below a good illustration of the "box," as it looks unfolded. Here is what the inventor says concerning it:

Although these boxes are destined to find their way into, and fill a long-felt want in, many channels of trade, they were invented by a honey-producer, to fill the needs of that industry.

With the present cheapness of sugar, in order to maintain good prices for the



Stewart Honey Box.

extracted honey, it will be necessary for the honey-producer to take some steps to increase the demand for extracted honey as a table article, and sell less for manufacturing purposes. In order to accomplish this, it is necessary to put up the article in convenient shape for retailing, and for this purpose the almost universal demand is for small packages, as most grocers will not handle the goods in bulk. But, to meet this demand, with any heretofore known package, the cost of the honey had to be raised to that extent that the goods became an expensive luxury.

These boxes are made of white basswood lumber, and are very light, and railroad companies take them at the same rate as honey in cans, or barrels, which is third-class. This difference in freight on a 500-mile haul will amount to several cents per pound. Then, these boxes are strong and durable. Do not jump at the conclusion that they are frail articles, to hold granulated honey.

It is also used for the shipping and retailing of comb honey. Each box for holding sections is 2½ inches deep, and holds three sections; the little boxes hold the honey in place, and the waxed bottom prevents any leakage escaping.

The Honey Crop for 1892 in the United States is further mentioned in *Gleanings* for Aug. 15th. It will be remembered that on pages 135 and 199 of the BEE JOURNAL, this subject was referred to, and on the latter page a partial report was given. The following is what Bro. Root says later, after receiving fuller information from each State and territory, thus enabling him to revise the former statement of the condition of the honey crop for 1892:

Within the last two or three weeks we have received a large number of additional responses in answer to our request, asking for reports regarding the condition of the honey crop of 1892. This request, the AMERCIAN BEE JOURNAL kindly copied, urging their readers to send on ther answers to us. Through the courtesy of that journal we are enabled to make this report very much fuller, and more accurate, than we should otherwise have been able to do. By condensing the replies, and collating them together by States, we submit the result to you in the revised table below:

Alabama—fair.	Michigan—fair to good.
Arkansas—indifferent.	Minn.—fair to extra good.
California—very poor.	Mississippi—very poor.
Canada—fair.	New Hampshire—fair.
Colo.—below average.	New Jersey—poor.
Connecticut—poor.	New York—poor to fair.
Delaware—very poor.	North Carolina—poor.
Florida—fair to good.	Ohio—fair to extra good.
Georgia—fair.	Penn—fair to good.
Illinois—poor to good.	South Carolina—fair.
Indiana—poor to fair.	Tennessee—poor to fair.
Iowa—fair to very good.	Texas—poor to fair.
Kansas—fair to good	Utah—poor.
Kentucky—poor to fair.	Vermont—poor to fair.
Louisiana—fair.	Virginia—fair.
Maine—fair.	Washington—good.
Maryland—poor.	West Virginia—poor.
Massachusetts—fair.	Wisconsin—poor.

The adjective or adjectives defining the condition of the honey season opposite each State represents the majority of the reports for that State. In some cases only one or two have responded for their States, these being mostly in the South; but from the leading honey States, reports came in very freely, so we think we are enabled to give a pretty fair idea of the season.

For the United States as a whole, the honey season has been a slight improvement over last year, although we cannot call it an average year. It may be well to call attention to the fact shown in the table, that Ohio, Iowa, Minnesota, Michigan took the lead in honey production this year, while California, usually the banner honey State of the Union, shows almost a total failure.

IN SUNNY SOUTHLAND.

CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Bee-Caves in Texas—Mistaken Ideas.

I suppose you have all heard of the bee-caves in Texas, where the bees work through an orifice in the rock, in a stream as large as a flour barrel, and where wagon-loads of honey have been taken, etc. These statements somehow or another get magnified terribly by the time they reach the press.

Now, please let me reason with you a little, and then I think you will agree with me that it is unreasonable, even for a bee-keeper, to suppose such a thing.

There are strong colonies of bees that occupy caves, I will admit, but there are no more bees there than in any other strong colony, as there is a limit to their strength. As we all know, there is only one queen, or perchance two, as in some instances in our hives, but one of them is usually old, and of no value.

These caves have only one swarm in them—not 4 or 5, or a dozen colonies, stationed in different parts of the cave—as some say, and others think, that all work through the same entrance. Such a cave has not been found yet in Texas. So there is only one colony, and the progeny of one queen, and they seldom have more combs than they can cover.

But inexperienced people have visited these caves at times when the bees were taking an afternoon play-spell, hence the exaggeration. Others have worked into them and taken out as much as a wash-tub of honey, and that widened as it went.

The bees in these cliffs are usually hived in a large crevice or crack in the bluff—very often not more than a foot deep, and at other times the combs are built clear out on the outside of the rock.

One friend asks, "Do they swarm?" Yes, they swarm as other bees do, but if the crevice is a large one, they only swarm in good years. But bees in Texas swarm if hived in a car box, just the same as if hived in a common hive. Swarm they will. Colonies have been known to swarm where they built in the grass on the prairie; they surely had room enough there. So, when conditions are right, bees *swarm* in Texas because—they want to.

Bee-Notes from Texas.

THE SEASON AND FALL CROP.—Within the last three weeks the bees here have been doing pretty well, and the hives of strong colonies are full of honey. Up to this time we have had very little surplus. Most of this honey is from cotton, and is very nice. The prospects were never better for a good fall crop. We are having now plenty of good rains, and all fall honey-plants are in splendid condition. In this part of Texas the crops of wheat, oats and corn are above an average, and cotton is very promising.

QUEENS IN GOOD CONDITION.—I received a lot of six queens a few days ago from a Texas queen-breeder, in the best condition of any ever received by me—not a single bee was dead in the whole lot. They were all safely introduced, and were doing well yesterday.

BEES IN STATUE OF LIBERTY.—Speaking of the swarm of bees in that vase at Washington (page 168), reminds me that I have been told, and I think it is true, that there is a colony of bees in the Statue of Liberty on the dome of the capitol at Austin, Texas. This statue is over 17 feet in height, and stands over 300 feet from the ground. I think that what honey the bees store they will be allowed to keep.

QUEEN THAT NEVER LAID.—I had a young queen a few weeks ago which I kept for six weeks in a pretty strong colony, and she never laid a single egg, so far as I was able to discern, and when I killed her she had not a single egg in her abdomen. I never noticed anything of the kind, and presume such instances are very rare.

QUEENS KILLING EACH OTHER.—In regard to young queens killing each other as soon as they hatch out, mine always do, except in a colony that has cast its first swarm, and intends to swarm again, when I suppose the bees guard the young queens and keep them apart until they swarm, and then they are allowed to come together, when the strongest and most lucky one only survives after a few hours' struggle.

ITALIAN QUEEN AND BLACK DRONE.—And still our bee-friends are trying to solve the problem: "Will a pure Ital-

ian queen, mated with a black drone, produce all three or more yellow banded workers?" I see some answer "yes" or "no," and some, "I think so," or "I think not." In the very nature of the case, I claim that it is impossible to tell certainly, as we cannot control the mating, and all of us that have had experience know that queens from imported mothers, and from our purest home-reared queens, frequently produce hybrids, from pure black to three-banded. Did you ever know such a queen to produce all black workers? and if not, why not? Until I meet with such a case as this, and with all respect for the opinions of the brethren, I must say that one would be as likely as the other; I cannot answer "yes" or "no."

SEVERAL EGGS IN A CELL.—In regard to several eggs in a cell, I would say that once this spring, in examining a hive whose colony had cast a swarm and the young queen had commenced laying, I found several cells that had two or more eggs each, and one I counted had seven. I let them alone, and the queen proved to be very good and prolific.

HARD TO KEEP COLONIES STRONG.—It has been the most difficult season I have ever known, to keep my colonies strong and in good working condition. Why it is so, I cannot tell, and now many of them are not strong enough to gather a large surplus. A. C. ATEN.

Round Rock, Tex., Aug. 10, 1892.

QUERIES AND REPLIES.

Extracting Nectar from Unsealed Combs.

Query 835.—1. Is it advisable to extract raw nectar from unsealed combs, and ripen the "green" honey artificially? 2. If so, what kind of an arrangement is best for the purpose?—Ohio.

Not with us.—DADANT & SON.

It is not advisable.—M. MAHIN.

1. No. 2. I don't know.—E. FRANCE.

1. No! Most assuredly not.—J. E. POND.

1. I think not. 2. I don't know.—J. M. HAMBAUGH.

1. *No.* 2. A good, strong colony of bees.—H. D. CUTTING.

No; but if you *will* do it, solar heat is the best.—MRS. L. HARRISON.

1. No. There is nothing so good as a comb for ripening honey.—R. L. TAYLOR.

It is not advisable, and will prove unsatisfactory in the end.—J. P. H. BROWN.

I think it is not advisable, taking all things into consideration.—G. M. DOOLITTLE.

1. For some, yes; for some, no. 2. Several arrangements are given in the books.—C. C. MILLER.

1. No. 2. There is no arrangement that will do it half so well as the bees can, and do.—JAMES HEDDON.

I think not; and, furthermore, I believe that the bees alone can make honey out of "raw nectar."—G. L. TINKER.

No, sir! Such honey is simply sweet, if ripened by heat or sun, without the flavor or fragrance of good honey.—C. H. DIBBERN.

I would extract just when the bees have nicely commenced capping the honey, and draw it off in tin or earthen vessels to thoroughly ripen.—MRS. J. N. HEATER.

1. It may be done, but I doubt the advisability of doing it. 2. Large open cans, or barrels in a dry, *warm* place. Cover with thin cloth to keep out flies, etc.—A. B. MASON.

1. I have tried ripening raw honey, and prefer to let it ripen in the hives. 2. A large tank, such as is used by the Californians, I should think would be best.—MRS. JENNIE ATCHLEY.

I would wait until just as the bees were commencing to cap it over; then I would extract, and keep it in a hot room in vessels covered with cloth. This plan I used for years, and never heard complaint of the honey.—A. J. COOK.

1. Ordinarily, I believe in extracting only ripe honey. There may be localities where the experienced apiarist with modern appliances might profitably extract "green" nectar, and ripen artificially. 2. I don't know.—EUGENE SECOR.

1. I think not. I don't think you could do a worse thing for yourself and for bee-culture. 2. Let the bees thicken and temper your honey in the hives before taking it, and you will have no use for any artificiality. When you once get a supply of good combs to "tier up" as fast as your bees need the room, you will find that nothing is cheaper and better than to make your bees cure and finish up your honey.—G. W. DEMAREE.

Raw nectar should never be extracted from the combs—the bees will do the ripening best.—EDITORS.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Bee-Keeping in the Pacific Islands.

BY "MALTA."

While strolling quietly through the lovely groves of mango, breadfruit, cocoanut, and other tropical plants, the well known *roar*—it was more than a hum—of busy bee-life struck my astonished ear, for I had been told that the nearest hives in Tahiti were at least 3 miles from Papiete, and I was actually among the houses and gardens on the skirts of the town; however, very few steps brought me suddenly upon an apiary of nearly 100 colonies, and these I proceeded to inspect.

Platforms standing some two or three feet from the ground were scattered about under the trees, and upon each stood about half a dozen hives almost touching one another, carefully pent-housed over, but otherwise very carefully kept; bits of wax, broken combs, empty boxes, etc., laid about anyhow, hives not painted or mended—in fact, "Tahiti-like" in every respect.

The hives were peculiar—formed of a series of boxes about 18 inches high, the same across, but only 6 inches from back to front, placed one behind another with a board to close the front, and another the back; the whole kept close together by a rough cramp and wedge arrangement.

They looked exactly as 4 or 5 section-crates or "lifts" would look standing on their sides, one behind another. The edges fitted badly, or rather didn't fit at all, so that the bees found their way in where they pleased—side, back, front, top or bottom.

For the perpetual summer of Tahiti, the arrangement answers well, as it gives the necessary ventilation, while the pent-house takes off the rain and shades the hives from the direct rays of the sun.

Internally, each box or section of hive, had two rows of lath battens running from side to side, 4 in each row, one row close to the top, the other row about half way down, and on these the combs were *supposed* to be built, and then removed, batten and all, when completed and full.

The bees appear to be very small, but sturdy, very yellow, quite as much so as Cyprians, but without the delicate figure of that race; exceedingly hairy, and from their shape and make I should say are cross-bred. The drones also are small.

Bee-keeping has been largely tried in Tahiti, but given up, there being no energy and no market for the honey, and the peculiar flavor of the cocoanut did not meet with approval. Probably queens have been imported from California, and hence the cross-bred stock.

At Fanning Island—a coral atoll on the equator—I found a hive on the modern plan, the owner, the only white man, told me he knew nothing of bee-keeping, but managed, nevertheless, to get 60 pounds of honey in a year from his solitary hive. He had lost 2 colonies by lizards, ants and insects, so had placed the present one on a platform erected in a pond, and now defied the enemy.

He said the bees were very savage, and worked all the year around on the cocoanut blossom, but he did not know when they swarmed. The bees were dark, and clustering very thickly outside the hive, owing to heat, as he had no shade-board.

The honey he showed me was pale, and without much flavor, but it was difficult to judge fairly, as it was squeezed out by hand, and not given a chance of showing to advantage.

Panama.

Importing Apis Dorsata at Private Cost.

W. C. FRAZIER.

I notice quite a number of references of late in the bee-periodicals and elsewhere concerning importing *Apis dorsata*—the giant bees of India—by the Government. It would be desirable if we could get the Government to engage in such a scheme, and would perhaps be a great benefit to the bee-keepers if we could have them undertake it. But the Government has a habit of letting private individuals undertake all such matters, and if they would move in this matter, it would be a long time before the people would come into possession of them. Now, if these bees are worth importing at all, they are worth getting at private expense. The preponderance of evidence seems to be that they would, without a doubt, be a valuable acquisition.

No bees have been brought to America but have proven as good here as in their native land. Nearly all the stock of all

kinds which have been brought into America have done as well, if not better, than in their native land. Why should not *Apis dorsata?*

Why not form a company, and send some capable person after them? It would be impossible, by any means now known, to send them through to America from India alive, and there would have to be some intermediate station. A company with $4,000 or $5,000 could secure these bees, and have their money back from them before the Government will be ready to send for them.

Just to see how many, who think we should have them, are willing to back their opinion with cash, suppose we say we will put the capital stock at $20 per share, each share holder having a vote on rules and regulations governing the company. Now, how many shares do you want? Please don't all speak at once.

Atlantic, Iowa.

Hiving a Cross Swarm—Patents.

MARK D. JUDKINS.

On pape 113 Mr. C. H. Dibbern speaks of bee-escapes. I think the most of us had a "bee-escape" last winter and spring, through which the most of our bees escaped to "where the grape-vine twineth," never more to be seen or heard in our apiaries.

My bees are doing very well now. From the 7 colonies that I had left on June 1st, they have increase to 21. I have given them full hives of comb, and they appear to appreciate them.

I had a colony of "yellow jackets" come out yesterday (July 24); they clustered on a willow tree, the limbs of which are very brittle, and while I was getting a hive ready, the limb broke, and let them down; but up they went, and down came another limb; they broke three limbs, and when they got settled on the fourth limb I was there with my ladder, and took them down, and shook them on a cloth in front of the hive. That was the "straw that broke the camel's back."

Just at that time about half a dozen of those harmless "cusses" perched themselves on my nose, and as near as I could tell the business end of each bee came in contact with my nose at about the same time, and I felt a good deal like a fellow trying some of the new catarrh remedies. They started the tears from my eyes all right enough, but as soon as I got so I could see again, I hived them all right, and without any more crossness from the bees. I have not used a veil or smoker this season so far.

There is no end to flowers, and basswood will be in bloom by July 25th, then if the coast is clear, we will get some honey.

Haying has commenced, and bees will have to look out for themselves for a while. The weather is hot and dry—80° to 90° in the shade, with a shower now and then.

INVENTORS AND THEIR INVENTIONS.

Frequently I notice some one speaking of worthless patents being issued. That reminds me that I am the inventor of the first 3-wheel riding-plow, and every plow manufacturer between here and New York that saw my nice little plow model, pronounced it a failure. They laughed at me, and wanted to know what I wanted that third wheel for. I told them then that 3-wheeled plows would come into general use, and to-day there is not a plow company of any note that is not putting up my 3-wheel plows. But so far they have kept from paying me any royalty.

I do not like to see people so quick to condemn any new device, when the inventor has put his time and money into it. It is the inventions that have made this country the leading country in the world; but there is a certain class of people that never risk a cent in anything unless they can see 2 cents coming back to them, and this class of people are always crying out at the top of their voice, and warning others to look out for that and this fraud, swindle and nuisance of a patent. If the inventors of this country had been made up of the pickaninny nature that these people are, they never would have put in a dollar into the patent office for inventions, and never put in years of hard study figuring out the new and useful inventions. I am like all other inventors, I have put my last dollar into a new machine more than once, and you will find in every community these howlers. Thousands of men buy patent rights, and then never do a thing with them to make a dollar, and this class do considerable howling; when, in many cases, if some live man had taken hold of the invention and pushed it, he would have made money out of it for himself and others.

There are some poor inventions, but more good ones that are never used, so please don't "jump on" a man just be-

cause he has put $500 or $1,000 into improving some article.

When a man comes along selling patent rights, don't be afraid of him. He hardly ever bites any one. Examine his invention, and if you can see some merit in it, give him credit for what you see; but if yon do not happen to see lots of dollars and cents in it, don't call him a fraud and swindler, for perhaps the very next man he shows the device to, has a different idea of the matter, and can see that it is a good thing.

Sometimes a man gets out a patent similar to some rude article that some one a thousand miles away has made and used. These people think the inventor has stolen their device. It would keep a many busy to look into every man's house in the United States to see if they were making a machine like his.

Osakis, Minn.

My Experience with Punic Bees.

C. E. MEAD.

I bought a Punic queen "because the bees were so gentle that it was hard to make them sting." I introduced her in October, 1891, but she did not lay any last year.

I watched for the little black bees, but did not feel sure of seeing any until April. (I put the queen in a colony of hybrids when I introduced her.) I did not see much increase until June 15th, then they increased rapidly. On opening the hive I got six stings in a very short time. I find bees of all colors, from black to three nice, yellow bands. They are strong in bees and honey, but do not go into the sections as readily as the pure Italians.

They are an entirely new race of bees. They resent any jar to their hive, or to a frame they are on. In actions and size they resemble the Syrians. They are not easy to control with smoke, though they all can be driven out of the hive with it. As soon as the smoke stops, they are ready to come for the operator again.

They are the worst bees to handle I ever saw. Their stings are not as virulent as the Italians. They do not get up any earlier in the morning than my other bees. While they have done fairly well, they have not done as well as my other colonies, with one exception. I do not think I have the pure Punic bees.

This has not been a season to test any bees. There was only three weeks from March 15th to July 3rd that bees could fly. We had cold, northeast rains and winds. I had to feed my bees to keep them from starving, which stimulated them to work. The field or older bees would go out, get caught in showers, and never get back. The better workers a colony was, the greater the loss.

My bees were no stronger on July 4th than June 1st. July 4th found my hives full of brood and young bees, with very few field bees, and not more than 2 pounds of honey to the hive. The surplus will not be more than 15 pounds per colony.

Chicago, Ills.

"To Scout" or Not "To Scout?"

ROBERT H. WILLIAMS.

I am one of those "enthusiastic people" of whom Mr. Demaree speaks in his article on page 148, and I will try to give a reason for the faith that is within me.

Last summer (1891) there was an extra hive out by the side of the others, with a frame of empty comb in it. It had been there several days, when one morning we noticed bees going in and out, and crawling around the eutrance. They were blacks, and ours were nearly pure Italians, so we knew they were not from the other hives.

Having read about scouts in the books, we at once concluded that they were scouts. We watched them closely, and by 11 o'clock very few bees were to be seen. Just before dinner we were all out in the yard looking at the hive, which the bees had all left, and lamenting that they were gone, when over an elm tree at the corner of the house came a swarm of black bees. They alighted on the front end of the hive, and in half an hour were all in, and peacefully at work. This was the 5th of July.

Immediately another hive, with a piece of comb in it, was mounted in a box-elder tree in the horse-lot. The boys watched it morning, noon and night, as we went to and returned from the fields. One evening, about a week later, we noticed for the first time bees going in and out of it. They acted just as the others had done, and we thought they were scouts. They left that night, but returned the next morning, and

lingered around all forenoon. These also were blacks.

Just before dinner I went down to look at them. As I drew near, I saw that the tree was surrounded by a flying swarm. I went and looked at the hive, the front end of which was by this time covered with bees, all crawling in just as fast as they could. In a little while they had all gone in and were at work.

They were taken down, and another hive was put up in the same place. We watched it for a while, but soon grew tired and ceased.

On Aug. 30th (1891) I chanced to be mowing weeds near the tree, when I heard a swarm coming. In half an hour the whole performance was re-enacted. Since then we have caught several, but I have not been so fortunate as to see any more just taking possession of their new home. If these were not scouts, why do not bees from our own hives bother around these decoys?

Last June (1892) a colony belonging to a neighbor swarmed, and was resting on a cherry limb, when they suddenly took wing and went to a box which he had put up in an apple-tree. These, with other experiences which I have had, confirm me in the opinion that bees do systematically "scout" for a home whenever it becomes necessary. I think this would require no more mental power than a great many other things which they do, and I shall believe in "scouts" until I hear something to disprove the theory.

Beatrice, Nebr.

Bee-veils, Honey-Plants, Hairpins, Etc.

J. E. PRICHARD.

I have not examined my hives much of late with the mercury at 112° in the sun, and 98° in the shade. It is too much to don the veil. By the by, why has there not been an improvement in that useful appendage? The white bobbinet is almost as hot as muslin. Why not bring out something better, say a stuff with meshes 8 to the inch? That would be fine enough. The bobbinet is about 20 to the inch, and too hot for any comfort. The next time I visit the city, I shall look for something that will afford more ventilation.

Yesterday being the first endurable day, I opened the supers, and with two exceptions the bees were at work in the top sections, having them nearly full, but none of them seemed to be sealed. We do not look for honey here before fall, say about middle of September or first of October, as we have to depend entirely upon wild flora.

IRON-WEED AND OTHER PLANTS.

I have just discovered a honey-plant that has always been considered a nuisance—what we here call the iron-weed. It flourishes in low swamps and meadows, and in ditches, often filling the latter so as to stop the water. It is covered with a pinkish or purple flower, and is just loaded with bees. It luxuriates to within 20 feet of my apiary. We also have the golden-rod, blue asters, heart's-ease, or, as we call it here, "leaden-heart," and plenty of nameless flowers on which the bees work, but I do not know of their value, not being a botanist, but I shall endeavor to become a "bee-ist," as I love to handle them.

I have interested one lady in the bee-business and in the BEE JOURNAL, and she is quite enthusiastic. She has invited me to come and help her rejoice over her success, but I have not had time to spare, but I may soon if I have an opportunity.

HAIRPINS TO HOLD TRANSFERRED COMBS.

I will give a hint to older apiarists, and I wonder the lady apiarists have not before this let it out. It is this: When you want to transfer comb from a box-hive to a frame hive, just pierce the side and bottom bars with a small awl at intervals of 3 or 4 inches, with 2 holes opposite about ⅛ or 3/16 of an inch. Then get 2 or 3 papers of cheap hairpins, and when the comb is fitted in the frame, push a hairpin astride the septum, and I will wager nothing will beat it to hold the comb in place until the bees fasten it, when the pins can be withdrawn, and the job is completed.

I have learned much since I commenced bee-keeping, and the best lesson that I have learned is that I do not know much, which is more than some others have learned. I would like to have a little more knowledge of the science of parthenogenesis, as I think if it were well understood it would save us from a great many serious blunders.

This has been a lovely day, and the bees are just shouting for joy. Methinks when I see them dip in some lovely flower I almost hear them take up the refrain, "O glorious fountain, here will I stay," etc.

Port Norris, N. J., Aug. 14, 1892.

Peculiarities of Swarming, Etc.

S. B. SMITH.

There are some things about the honey-bee that are difficult to understand or explain. In a timbered country, if a swarm of bees leave their home in swarming time, and take to the woods, we have reason to believe that scouts have found a hollow tree, and prepared it for a future home; but here in the Northwest there is a scarcity of timber, there being no timber except a few small, natural groves around a few small lakes, consequently honey-bees cannot find homes in the timber; but this does not deter swarms from leaving their homes in the swarming season, and seeking homes elsewhere.

There are a number of instances where swarms have taken possession of empty hives. One man found a very large colony in an old, abandoned well, with a large amount of comb well-filled with honey. Another colony was found in a dry-goods box.

A few weeks ago one of my neighbors sent word to me that there was a swarm of bees at his place, and he wanted me to come and get them. I started at once with a hive, and when I got there I found a large swarm of bees in the grass near a haystack, and my neighbor told me that they came there about 5 o'clock p.m., two days previous. They had built a small amount of comb, and were going and coming as though they were gathering honey. I had no difficulty in hiving them, and they are doing as well as my other colonies.

It has been a poor year for bees. The spring was late, cold and wet, and many colonies died after they were placed on the summer stands. The weather has been more favorable since the first of July, and bees have done fairly well in swarming, but have stored only a small amount of honey in the sections.

CUCUMBER AND GOLDEN-ROD.

There is a large amount of wild cucumber vine here, and it furnishes plenty of honey. Golden-rod is in bloom, but I do not see any bees working on it this year, so I concluded there is no nectar in it.

SOWING ALSIKE FOR THE BEES.

I sowed a small field with alsike clover last spring, and it is literally covered with bees every day. If it winter-kills I will sow again in the spring. I think it will pay all bee-keepers in the Northwest to sow Alsike every spring purposely for bees.

Keeville, Minn., Aug. 20, 1892.

Black vs. Italian Bees.

R. A. SHULTZ.

I suppose some bee-keepers will agree with Mr. Ellingwood, that the black bees are a valuable race, but I do not claim that they are more valuable than the Italians. Several have claimed that the Italians are good defenders and moth cleaners, but any bees will do this if they have a good queen and plenty of bees in the hive. Keep them strong, and there is no danger from moth.

As to the vindictiveness of blacks, I cannot see a great difference between them and the Italians. If I were to roll Italians between the combs, I would expect to be stung, while they pay very little attention if not mashed. The blacks are very easily subdued with smoke, and are better comb-builders than the Italians. They also enter the surplus department quicker than the Italians, and cap their honey whiter.

The Italian bees breed up earlier in the spring than the blacks, which trait we need here to gather the poplar honey. I think the Italians beat the blacks in gathering honey until the sourwood flow comes, then the blacks are ahead—they get rich on the sourwood, while a lot of the Italians will not work on it.

While extracting, the blacks are easier to get off the combs. That is a very good point for a honey-producer, though not for a queen-breeder. For honey I would rather have hybrid bees bred from an Italian mother mated with a black drone. For the pleasure of the pursuit, I would like to have some very yellow Italians just to amuse visitors, but for gathering honey I think the dark ones would beat them. I prefer blacks to build combs.

It seems that some bee-keepers will not give the blacks credit for their good points, while others will not give the Italians due credit. I do not claim that the black bees are hardier than the Italians. I do not think they will excel in this—they need the same protection for winter. But generally the Italians breed here at their full capacity, and miss the honey-flow, and become consumers in place of producers of honey,

until they become adapted to the country. This is the case when they are from some other place. They breed for the flow where the queen came from.

Cosby, Tenn.

Experience with London Ear-Trumpet.

REV. L. L. LANGSTROTH.

Perhaps very few of my readers realize how much more comfortable it is to be old in these days than it was some two or three hundred years ago. Before the invention of spectacles, how often a man, still in the prime of life, must have found himself no longer fit for nice work, through the failing of his eyesight! Now we have spectacles, for the relief of such inability, also for seeing objects at a distance, such, for instance,

Oraphone, or London Ear-Trumpet.

as the pebbles on the roadside, or the cherries on the trees, almost if not quite as well as the young.

It is true, that defective teeth were not so common in the olden times as they now are, but still we know that they were so common that specimens of how this infirmity was remedied have been found in old skeletons, almost as perfect as the modern invention.

But what can be done to relieve those who are hard of hearing? Few can be persuaded to use the huge, old-fashioned ear-trumpet, or the long-rubber tube; and yet when one becomes so hard of hearing as not to hear the preacher or the orator, or even the ordinary conversation of the social circle, it does not take long to realize what a great misfortune has befallen him. Such an unfortunate soon perceives that the world is too busy to try to make a deaf man hear, and gradually ceases to attempt to hear any spoken words, except such as are directed to himself personally. Slowly, but surely, he drops out of social intercourse with his fellowmen, and life has lost a very large part of its charms.

About two months ago a friend, who is very hard of hearing, told me how he remedied it by pressing the thin surface of a patented invention against his teeth; but as I had none but artificial teeth, it was of no use to me. He then gave me a little ear-trumpet, known as the "London trumpet, or oraphone." I was so delighted with it that I took it to bed the first night to have the pleasure of hearing the clock tick when I awoke. Speaking of it to different friends, I found that there was a demand for it; but while it helped many, others seemed to get no important relief from its use.

Finding that, by helping poor, deaf, humanity, I can at the same time help myself, I am prepared to sell these trumpets at the usual retail price, $4.50, to any of my readers who are hard of hearing, or have friends or acquaintances who may be so unfortunate.

The engraving represents its appearance—3¼ inches long and 2⅛ inches in diameter, is the size usually preferred.

On receipt, by mail, of a Money Order or Check for $4.50, I will mail one prepaid to any address. It may be kept on trial for two weeks; and if not found serviceable, it may then be re-mailed to me in the original package (postage only 5 cents), and the Check or Money Order sent me will be returned.

120 Ford St., Dayton, Ohio.

My Experience in Bee-Keeping.

W. A. FEE.

I have taken some interest in bees for several years, but year before last was the first I had bees of my own, which was one colony of Italians. Last year I secured 2 colonies, which made me 3 of Italians. I also caught 2 stray swarms of blacks, which started out well, but the moth got into them before I knew it, and had almost destroyed them. I united them, and in a few days they left the hive for parts unknown.

I got no honey last year, being a very poor year for honey. Last fall I had 3 colonies, and lost one last winter, which I think smothered, as there came a heavy snow, and I neglected to open the entrance, and when I opened the

hive I found the bees all dead, with several pounds of honey left.

When spring opened I concluded to go into the bee-business a little more extensively, and as a good many persons were discouraged from last year's poor honey crop, I got bees pretty cheap. Some were in Simplicity hives, and some in box-hives, which I transferred to Simplicity hives, as I like that hive the best. I now have 24 colonies, most of them pure Italians, some hybrids and some blacks.

I notice a good many praise the blacks; as this has been a poor honey season so far, I have had a good chance to watch and see which are the best, the blacks or the Italians. My Italians are all strong, and in good condition—so are the hybrids. The blacks are weak, and wanting to rob. The only thing I find the blacks good for is to sting. I am quite sure the story of Job in the good book would never have been written if he had been compelled to handle black bees, if they are all like mine—always ready for a fight. I intend to Italianize them all I have 3 beautiful young queens about ready to put in; they are large and yellow.

I have a one-frame observation hive in which I have a young queen which did not mate until she was 11 days old, it being damp, cool weather. We have had but five good honey days this year, one the forepart of June, and four so far this month. What they are getting is mostly from white clover.

I have made a very handy scraper to scrape or cut out burr-combs without taking out the frames. It is made of a strip of sheet steel, or heavy sheet-iron, with a wooden handle.

Rockport, Ind., July 14, 1892.

The Rendering of Beeswax.

W. M'NALLY.

In the rendering of wax from refuse combs much depends upon how cleanly the work is done. Very often there is so much loss through carelessness in bespattering cloths, dishes, etc., which hardly compensates for the wax taken. Old combs yield very little, but it is the best plan to get these melted up, and thus prevent a feeding-ground for the wax-moth to multiply.

Where one can afford to buy a wax-extractor, this will be found a most useful article, especially for clean, new combs, and as the whole apparatus is usually complete in itself, there is little need to soil other dishes with wax.

Some bee-keepers do not care to go to the expense of an extractor, and to these the following method may be found useful:

After the honey is taken from the combs, these should be washed in a running stream, or under a tap, to remove all honey left, and as much of the pollen as possible. Squeeze the combs into balls with the hands, and put in a bag—a washed sugar-bag will suit the purpose. Fill the boiler or copper with water, preferably rain water, and sink the bag of combs in the boiler under the surface of the water; at the same time see that the bag does not touch the bottom.

As the water boils, the wax will ooze out of the bag and float on the surface, where it may be allowed to cool, and taken off in one sheet, or it may be skimmed and dropped into cold water, which will greatly improve the color. A second melting and straining through a piece of muslin into any desired mould completes the operation.

In most dairy farms there are large boilers for steaming turnips and soft food for cattle, heated with a steam-pipe let into the water in the boiler. Where the use of these could be had, a large lot of combs may be melted up in short time by filling the bag with combs, and heating as above mentioned.

Those who desire to have a first-class sample of wax should, at the beginning of the season, collect all the comb cappings and pieces of white comb. These should be washed and put aside until the desired quantity is collected. Wax taken from combs gathered in a clover district is of a pale yellow or straw color, while that from a heather district is almost white.

It is erroneous to suppose that the more wax is boiled, it will become lighter in color. Dark wax may be made lighter in color by pouring it into cold water. When put into the moulds, allow the cakes to cool slowly, as they are apt to crack, and so mar the appearance if intended for exhibition.—*British Bee Journal.*

The Globe Bee-Veil, which we offer on the third page of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, at $1.00 each.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Sept. 7, 8.—Nebraska, at Lincoln, Nebr.
L. D. Stilson, Sec., York, Nebr.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

SELECTIONS FROM OUR LETTER BOX

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

An Experience in Bee-Keeping.

We began bee-keeping in 1888 with one colony, bought 3, and lost 2 in winter.

In 1889 I increased by swarming and buying to 31 colonies. In the winter I lost, by starvation and diarrhea, 12, and by spring dwindling, after taking them out of the cellar, 10 more; so we began the season of 1890 with 9 colonies, and two no more than nuclei. We increased these to 15, bought 10 colonies, and took off about 500 pounds of extracted honey. We wintered these on the summer stands in chaff-packed outer-cases, and all came through in good condition.

In 1891 we increased to 29, took off about 100 pounds of dark honey, and fed 450 pounds of sugar for winter stores. We wintered them on the summer stands as before, and lost 2 colonies in the spring, one by starvation, and one by robber bees.

This summer (1892) we have increased to 43 colonies, and have taken off about 3,500 pounds of light honey, and all our bees are in good condition for winter, with about 50 frames of capped honey, which we saved to patch up any that need it in the fall. We attributed our success in wintering bees the past two seasons to winter cases, and a strip two inches wide under the brood-chamber, and a good supply of honey.

I think the AMERICAN BEE JOURNAL is about the best investment for any bee-keeper who wishes to make his business a success.

Bee-keeping is a thing which I could not learn by inspiration, and it was only by faithful study of the "A B C of Bee-Culture," "Cook's Manual of the Apiary," the AMERICAN BEE JOURNAL, and close attention to business, that we have had the amount of success we now enjoy. E. H. STEWART.

Niagara Falls, South, Ont., Aug. 24.

Poor Prospect for a Fall Flow.

Well, here we are, and no honey. This has been the worst season since I have kept bees, and that is 15 years. Fruit-bloom did no good whatever—too wet and cold; locust did not bloom at all; and white clover was plentiful, but bees gathered no honey from it. We have taken no surplus honey, and there is very little in the hives, with poor prospect for a fall flow. So all our hopes for this year are blasted. I think the honey prophet from Tennessee missed it, for this part of Kentucky. His name ought to be "Jonas."

MATTHEW REBHOLZ.

Kane, Ky., Aug. 24, 1892.

Working on Heart's-Ease—Moths.

Bees are booming on heart's-ease, of which there are hundreds of acres here. This has been a busy season for us, and is getting "worse and more of it." We have not secured much honey, owing to running nearly every colony for queen-rearing. We expect to get a load of black bees soon, and make the most of them into nuclei. It is rather late in the season, but we *must* fill our orders. A fine rain is falling to-day, which will insure a flow of honey from heart's-ease for at least three weeks.

On page 247, Joseph Mason tells how to keep moth from combs by rain, or, as one might say—"throw them out-doors and let them take care of themselves."

For want of store room we "saved" about 100 combs out in the weather, but when we gave them to the bees the cocoons were so decomposed in the cells that the bees tore the combs down. All that we put over colonies and nuclei were O. K. Combs exposed to the sun will be worthless (except for wax) in a few hours of summer weather.

S. F. & I. TREGO.

Swedona, Ills., Aug. 24, 1892.

A Short Honey Crop.

The honey crop in this part of the State will be short, owing to dry weather. I increased my bees from 5 colonies to 22, and if they get enough to winter on I will be satisfied. Our honey is principally from heart's-ease.

A. W. SMITH.

Shelton, Nebr., Aug. 25, 1892.

Good Prospects for a Fall Flow.

This has been a very poor season for bees; some colonies have stored no surplus at all, while others have done better. We had such a cold, backward spring that bees could not fly much, and it has been raining so much that they could gather but little honey since it has been warm enough for them to work. Some honey is coming in now from cotton bloom, which is the nicest honey we have. The prospects are good in this county for a honey-flow this fall, there being an abundance of fall flowers. From 6 colonies I increased to 15.

I use a hive taking 8 thick-top Langstroth frames, and do not want anything better, unless it is the Hoffman frame. I think I will get that kind for next year, as they seem to be liked so well by those who use them. Cotton is almost a failure here. Corn and oats are good.

W. R. TATE.

Bowling Green, Miss., Aug. 25, 1892.

Bee Journal Posters, printed in two colors, will be mailed free upon application. They may be used to advantage at Fairs over Bee and Honey Exhibits. We will send sample copies of the BEE JOURNAL to be used in connection with the Posters in securing subscribers. Write a week before the Fair, telling us where to send them. We would like to have a good agent at every Fair to be held this year. Here is a chance for a live man—or woman.

COMBED AND EXTRACTED.

Some Old-Fashioned Flowers.

ETHEL LYNN BEERS.

Where are the sweet, old-fashioned posies,
Quaint in form and bright in hue,
Such as grandma gave her lovers
When she walked the garden through?

Lavender with spikes of azure
Pointing to the dome on high,
Telling thus whence came its color,
Thanking with its breath the sky.

Four o'clock, with heart uplifting,
When the loving sun had gone,
Streak and stain of cunning crimson,
Like the light of early dawn.

Regal lilies, many-petaled,
Like the curling drifts of snow,
With their crown of golden anthers
Poised on malachite below.

Morning-glories, tents of purple
Stretched on bars of creamy white,
Folding up their satin curtains,
Inward through the dewy night.

Marigold, with coat of velvet
Streaked with gold and yellow lace,
With its love for summer sunlight
Written on its honest face.

Dainty pink, with feathered petals
Tinted, curled and deeply frayed,
With its calyx heart half broken,
On its leaves uplifted laid.

Can't you see them in the garden,
Where dear grandma takes her nap?
See cherry blooms shake softly o'er
Silver hair and snowy cap?

Will the modern florists' triumph
Look so fair, or smell so sweet,
As the dear, old-fashioned posies
Blooming round on grandma's feet?

—Exchange.

House Apiary Like a Passenger-Car.

James Harker, who has successfully used house apiaries for 25 years, describes the one he is now using in these terms:

The house is 40 feet long, and resembles a passenger-car. The hives along each side might be compared to the seats in the car; that is, the hives represent the seats, and there is an alley way down the center. I use two rows on each side. The bottom rows of hives are on the floor; then half way up is a shelf on which the others rest. The house is used only in summer, it being only one thickness of stock lumber

nailed up and down. Each alternate board has a bee-entrance cut in it. Up to each entrance I push a hive so snugly that no bees can get into the house to bother with at work with them.

I enter the house from the south end. At the north end there is nothing except a small opening for ventilation in the very hottest weather. About three feet from the house I have a row of grape-vines that I throw entirely over the house, making a complete shelter during the hottest weather, and it looks like one massive grape-arbor with an entrance at the south.

I run my apiary for comb honey, and place the sections on top of the hives; as fast as filled, or nearly so, I raise them up, and on goes another super. On some of them I have had 120 sections, and others, upon which I used large sections, gave me over 130 pounds of fine comb honey.

In comparing the house to the car, I ought to have said, "all but the glass," as I use no windows, no screens or light of any kind. When I shut the door it is dark as night. If the bees come in the door when I am at work, I close the screen door, and go on with my work. —*Canadian Bee Journal.*

Some Side-Tracked Bee-Keepers.

The Rambler, in his travels, has many times been run off upon a side-track to let another train pass; but as I watched the other train, all at once that would apparently stop and my train would be the one apparently going; and how nicely our train did glide without a a tremor! But just as I began to rejoice at the smooth and rapid rate we were going, the trains parted, and, behold I hadn't been moving at all. Now, there is a little moral to this. A great many people imagine they are on the train, and going like Jehu, when, in fact, they are side-tracked, and are standing stock still.

Every now and then some one will arise, and, right in the face of all the brilliant lights in the bee-world, and the testimony of thousands not so brilliant, will advocate black bees and box-hives. That man is perhaps honest, but he is side-tracked, and seems incapable of getting on to the main line where the progressive movement is.

The bee-keeper who uses little, stingy starters of foundation in his brood-frames and sections, and claims that he can get just as much honey as the one using full sheets, is also standing on the side-track.

The bee-keeper who will go to a convention, smile, and shake hands all around, learn all he can and not become a member of the organization, and help with the usual fee, is not only on the side-track, but is on the dirt train (exceptions, visitors from another association). On the same train is the man who gets all he can out of a bee-paper, then refuses to pay for it.

Some veteran bee-keepers are strongly inclined to pitch into their brethren with a pen dipped in the gall of bitterness, because of a little difference of opinion. Their train was side-tracked in the seventies. Let's keep them there.

Those far-western bee-keepers who put up their honey in bad-smelling, second-hand kerosene cans are not only side-tracked, but they are trying to side-track all on the main line.

Those fellows using glucose are the ones not exactly side-tracked, but they are tampering with the switch. Look out, there! skedaddle! there's going to be a collision!

But the queerest case of this kind is where a whole train-load of bee-keepers in Canada were side-tracked because one or two inquisitive men examined the road and found that the rails were incorporated to the ties with Illinois spikes. Toot! toot! all aboard! For the land's sake, let us keep on the main line.—RAMBLER, in *Gleanings.*

Sweet Corn and Golden-Rod.

This morning the bees were sucking the sweet juice secreted at the axils of the leaves of sweet corn close to the stalks. Pollen from the tassels in fine powder is filling the air. Some persons jump at conclusions quickly, and, because they have never seen bees work upon corn, say that they never do. Soil, as well as climate, exerts its influence upon plants in the secretion of nectar, and while a plant may yield largely in in one locality, it may be of no value for honey in another. Where the nights are cool, as in the Green Mountains of Vermont, the golden-rod yields much honey, and the heads of bloom are full of bees at such times; but here, where the nights are warm during its blooming, it yields sparingly.—MRS. L. HARRISON, in *Prairie Farmer.*

Don't Fail to read all of page 323.

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When Talking About Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we offer some excellent premiums that you ought to take advantage of.

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Bee-Keepers' Review	2 00	1 75
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Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Almost Every Bee-Book that is now published we mention on the second page of this issue of the BEE JOURNAL. Look over the list and select what you want. For every new yearly subscriber that you secure for us at $1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apiarian knowledge among your friends.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

Premium to Every New Subscriber.—We will *give* to every new subscriber (with $1.00), for whom it is desired in place of getting any other premium we offer for work done, a copy of "RURAL LIFE"—a valuable pamphlet of over 100 pages, devoted to "Farm Topics, Live-Stock, Poultry, Bees, Fruits, Vegetables, Household, Home, and Miscellaneous Matter." Or we will send it, postpaid, for 25 cts. This is a rare chance for new subscribers to get some excellent reading for nothing—by sending $1.00 for one year's subscription to the BEE JOURNAL.

This Means You.—When ordering any of the books or articles which we offer clubbed with the BEE JOURNAL, or otherwise; or when sending anything intended for us, such as subscriptions to the BEE JOURNAL, or matter for publication, *be sure* to address everything to —**George W. York & Co.**, 199 Randolph St., Chicago, Ills.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 350.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, September 3rd. 1892 :

CHICAGO, ILLS.—Comb honey is coming in slowly. Good demand for choice stock at 15c. Extracted finds a ready market. Supply is increasing. This is a good time to ship to this market. White brings 7½c.; dark, 6@6½. Beeswax—Prime, 25c. J. A. L.

CHICAGO, ILLS. — We have inquiries for white 1-lbs. at 16c. for best grade; amber at 14c. Good demand for extracted at 7@8c. Beeswax—26c. S. T. F. & C.

KANSAS CITY, MO.—Recipts of comb and extracted are light, demand for both is good. We quote: No. 1 White 1-lbs. 15@16c.; No. 2 white 1-lbs. 13@14c. No. 1 Amber 1-lbs. 14@15c.; No. 2 amber 1-lbs, 10@12c. White extracted 7@7½c.; amber, 5@6c. Beeswax—22@25c. C.-M. C. C.

CINCINNATI. OHIO.—The demand is good for extracted at 5@8c. Demand is slow for comb honey, at 12@15c. for best white. Beeswax is in slow demand, at 23@25c. for good to choice yellow. C. F. M. & S.

NEW YORK, N. Y.—Demand is moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c. F. G. S. & C.

DETROIT, MICH.—Best white comb honey 12@13c.; but little left to sell. Extracted, 7@8c. Beeswax, 26@27c. M. H. H.

SAN FRANCISCO. CALIF.—Demand is quiet as old crop is nearly exhausted and new crop not in yet. We quote: Extracted, 5½@6 cts. Comb, 1-lbs., 10@11c.; 2-lbs., 6@8c. Beeswax—24@25c. S., L. & S.

BOSTON, MASS. — Demand is light. White 1-lbs., 13@15c. No 2-lbs. on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all. B. & R.

MINNEAPOLIS. MINN.—This Market is now dull in general, though some is being worked off, but mostly at cut prices. Fancy white, 15@17c., 1-lb. sections; dark, 8@10c. Extracted white, 7@8c.; dark, 5@6c. S. & E.

KANSAS CITY, MO.—Old honey is wholly cleaned up, both extracted and comb. New crop will be in about July 10, here. H. & B.

ALBANY, NEW YORK.—No receipts of new comb yet, but some call for mixed at 13@14c. Light, 15@16c.; dark, 12@13c. Extracted is in good demand at 7@9c. Beeswax—26@30c. according to quality and style. H. R. W.

Winter Problem in Bee-Keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

List of Honey and Beeswax Dealers.

Chicago, Ills.

S. T. FISH & CO., 189 South Water Street.
J. A. LAMON, 44 & 46 South Water Street.
R. A. BURNETT, 161 South Water Street.

New York, N. Y.

F. G. STROHMEYER & CO., 120 Pearl Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.
F. I. SAGE & SON, 183 Reade Street.
CHAS. ISRAEL & BROS., 110 Hudson Street.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Detroit, Mich.

M. H. HUNT, Bell Branch, near Detroit.

Minneapolis, Minn.

STEWART & ELLIOTT, ——

Boston, Mass.

BLAKE & RIPLEY, 57 Chatham Street.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 4th & Walnut Sts.

Your Subscription to the BEE JOURNAL—is it paid up to date? If not, please send to us a dollar for a year, and thus show your appreciation of our efforts in your behalf. Look at your wrapper-label, and if the date looks like this—"Dec91," that $1.00 sent to this office will make it look like this—Dec92.

We Club the AMERICAN BEE JOURNAL and the monthly "Illustrated Home Journal" one year for $1.35 ; or both of these Journals and the semi-monthly "Gleanings in Bee-Culture," for one year, for $2.10.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

When You Have any honey to sell, get some Honey Almanacs and scatter in your locality. They will sell it all in a very short time.

ONE DOLLAR PER YEAR.

Club Rates,—Two copies, **$1.80**; 3 copies, **$2.50**; 4 copies, **$3.20**; 5 copies, **$3.75**. Mailed to any addresses.

THOMAS G. NEWMAN, GEORGE W. YORK, } EDITORS.

Vol. XXX. Sept. 15, 1892. No. 12.

EDITORIAL BUZZINGS.

A Dialogue on Queen-Rearing will be commenced by Mrs. Atchley next week, in her department. It promises to be very interesting, especially to the beginner who wishes to rear his or her own queens. Look out for this "continued" dialogue about queen-bees.

Mr. Jas. A. Stone, the hard-working Secretary of the Illinois State Bee-Keepers' Association, asks us to publish the following:

The subscribers to the AMERICAN BEE JOURNAL, who in the future (as we get the time to mail them) receive copies of the first Annual Report of the Illinois State Bee-Keepers' Association, may consider themselves under obligation to our friends, George W. York & Co., of the AMERICAN BEE JOURNAL, who, at our request, kindly gave us your addresses. JAS. A STONE, *Sec.*

Poor Seasons or poor years are apt to occur in any business, and especially in an agricultural line. While the past few seasons have been rather severe on the bee-keepers, yet it cannot be that such will continue much longer. Bro. Root, editor of *Gleanings*, has had some conversation with an aged bee-keeping friend, which is summed up as follows:

A few days ago we were talking with a gentleman who kept bees many years ago. We referred to the poor seasons that bee-keepers had been having for the last four or five years, and asked whether this was to continue. Our old bee-keeping friend then related that, away back in the '60's, bee-keepers had four or five poor honey years in succession, followed by many years of good honey-flows. He also alluded to the fact that certain agricultural products were subject to cycles of four or five years. Well, *our* cycle of poor years, we are in hopes, is about up; at any rate, we shall keep on hoping; for "hope," says Eugene Secor, "is the bee-keeper's best bank account."

A False Statement is going the rounds of the press to the effect that visitors will not be able to get any drinking water at the World's Fair without paying for it. There will be an abundance of excellent water free to all who want it. Those who wish to drink mineral spring water, piped to the Exposition Grounds from Waukesha, Wis., a hundred miles distant, will have to pay one cent a glass for it. The free water will be that of Lake Michigan, brought by tunnel from a point four miles from shore, and much better than the inhabitants of most large cities are supplied with.

The Bee-Age, we now learn, was never born. It seems we were misinformed about it. But no matter, "'tis better so." When better seasons come again, will be time enough to talk of "the age of bees."

Read S. F. & I. Trego's Advertisement.

The Sangamon Fair and Springfield Exposition, which was held on Sept. 5th to 9th, at Springfield, Ills., issued a very elaborate Premium List of 120 pages. Mr. Jas. A. Stone was the Superintendent of the Bee and Honey Department, and the following is the generous list of premiums offered:

Largest and best display of comb honey	$10
Second best	5
Largest and best display of extracted honey	10
Second best	5
Best case of comb honey, 12 to 24 pounds	3
Second best	2
Best display of candied honey	3
Second best	2
Best display of beeswax	3
Second best	2
Best frame of Italian bees in observatory hive	5
Second best	3
Best and largest display of queen-bees in cages with progeny	5
Second best	3
Best imported Italian queen with progeny	5
Best quart of honey-vinegar	1
Best hive and furniture complete for comb and extracted honey	6
Second best	4
Best honey extractor in operation	8
Best exhibit of apiary supplies	10
Best display of brood foundation	1
Best display foundation for surplus	1
Best bee-escape	1
Best display of honey-plants, pressed, mounted and labeled with date of bloom	5

In a letter received on Sept. 5, from Mr. Stone, he said: "Although it is a poor honey year, our display in honey came in quite large."

The Ohio State Building at the World's Fair (see page 371) will be dedicated at the same time as are the general Exposition buildings—on Oct. 21, 1892—according to present plans. Speeches will be made by Gov. McKinley, ex-Gov. Campbell, and Senators Sherman and Brice. President Harrison is expected to deliver an address at the unveiling of Rebisso's equestrian statue of William Henry Harrison, which will stand in front of the Ohio building.

The Review is receiving some very encouraging endorsements now-a-days, which are also very much deserved. Seldom does a periodical of such tender years mature so rapidly and apparently so substantially. It certainly deserves its measure of success, and we can heartily "second the motion" found in this paragraph, from the last number of *Gleanings*:

What an excellent bee-paper the *Bee-Keepers' Review* is! It seems to be improving month by month. We have wanted to pat Bro. Hutchinson on the back several times of late, but we were afraid that our readers would begin to think that *Gleanings* and the *Review* were somewhat under one management. Not a bit of it. Both journals are managed and conducted separately; and although there may be a rivalry, it is, in the language of Bro. Hutchinson, "not an unpleasant one."

We club the *Review* with the AMERICAN BEE JOURNAL—both one year for $1.75.

Mr. E. F. Quigley, publisher of the *Progressive Bee-Keeper*, announces in his August number, which is just received, that he has "purchased the subscription list of the *White Mountain Apiarist*, and will commence filling its contracts with the September issue." As it is about the time for "doubling up" colonies, we are not surprised at this case of "doubling up" of two bee-papers. Mr. Quigley seems to be *progressive*, as the title of his paper indicates.

The Bee-Keepers' Union is again triumphant! John Foulkes, near Dubuque, Iowa, sued his two neighbors who kept bees, demanding temporary injunctions, compelling the owners to remove the bees. As they were members of the Union, the General Manager took charge of the case. The result is, that Judge Lenehan refused to grant the injunction, because it would "interfere with a business which the courts recognize as legal." More particulars will be given next week.

More than Pleased.—Dr. A. Sayler, of New Palestine, Ohio, in a letter dated Aug. 29th, expresses his pleasure over receiving the AMERICAN BEE JOURNAL and the book "Bees and Honey," in the following happy manner:

FRIEND YORK:—Your BEE JOURNAL, with back numbers from June 1, 1892, came to hand a few days ago, and I have been gorging most gloriously on them. More "sweets" for a dollar than I could have obtained spending the money for sugar.

To-day, the gorgeous bee-book came—"Bees and Honey." Pictures of the great bee-lights are just what I have been longing for.

This morning I read Father Langstroth's article on his sickness in the BEE JOURNAL, then I wanted to see his picture. To-day's mail brought it in the book. Ah! but he's a grand old man. He looks—an uncrowned king. The pictures in "Bees and Honey" show that all you bee-men—all the "big 'uns"—are prim and precise to a fault, and immaculately neat. Well, idlers and slouches will never get to the top in any of the branches of your craft.

Yours Respectfully,
A. SAYLER, M. D.

The Apiculturist for September came right on time, and is full of good things. Here are a few of Bro. Alley's "*Api*-thoughts:"

September is the best month for preparing bees for winter. Don't fuss with them late in the fall.

Twenty-five pounds of sugar, or $1.25 worth, will carry any colony of bees through the hardest winter.

Bees in the Bay State Apiary have gathered more or less honey all through the summer. Quite an unusual thing.

When those bee-keepers who have the Punics learn how to handle them, little complaint will be heard from stings. There is a great knack in handling bees to avoid stings. Some people cannot handle bees any more than they can the horse, or other domestic animals. The Punics are all right.

Don't be in a hurry about marketing your honey. There must have been a short crop of good honey gathered this year. Vermont bee-keepers have secured but little surplus, and this seems to be the condition in several States where large quantities of comb honey in sections is usually secured.

A big crop of new bee-papers is promised in the near future. Such things must be expected as long as fools and cranks infest the world with their existence.

'Tis pretty rough to be obliged to write this stuff with the temperature at 92° in the coolest place. 'Tis rough, too, to go into the apiary and put up queens when it is 120° in the sun. We poor mortals who rear queens and publish bee-papers have to do these things as well as a good many more things the common bee-keeper is not obliged to do.

All Visitors will be interested in the Agricultural exhibit, but its chief value will rest upon a much broader and more significant fact. The exhibit will afford a vast amount of information to many thousands to whom it will prove of incalculable benefit. The crops best adapted to different localities, and the reason therefor, the most improved methods of cultivation that are being pursued, the best results that have been secured, and the manner of their securing, and the perfection of products in every line—all these will be shown, and will constitute the more important lessons which the Agricultural exhibit will teach. Through the thousands who learn these lessons, and are sure to make practical utilization of them, the agricultural industries will receive such an economic readjustment and impetus as will result in increased productiveness and merit, and general benefit to the entire country, from the World's Fair.

Catalogues have been received from the following:—

Mrs. Jennie Atchley, Floyd, Tex.—16 pages—Bees, Queens and Nuclei.

John Nebel & Son, High Hill, Mo.—20 pages—Bee-Keepers' Supplies, Italian Bees and Queens.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 383.

BIOGRAPHICAL.

MR. ORANGE JUDD.

On July 26, 1892, was the 70th birthday anniversary of Orange Judd, the present well-known editor of the *Orange Judd Farmer*, whose home is at Evanston, Ills. Many were the surprises in store for him on the above date, which reminded the recipient that he had a host of warm-hearted friends who loved to show their honor for him, and their appreciation of his helpful life, by numerous gifts as well as the most loving and cordial congratulations and wishes that he might have "many, many returns of this anniversary."

There are many important events in such a busy, useful life as has been that of Orange Judd, which we should be very glad to place before our readers, but in the limits of our space we can only mention a few—such as have brought the greatest good to the American people, and the highest honor to him whose portrait so enlivens the opposite page.

Orange Judd was born July 26, 1822, in a log cabin near Niagara Falls, and grew up a hard-working farmer's son, thus gaining—as does every boy who is so fortunate as to have been born on a farm—valuable experience and preparation for his life work. He was a great reader, his special inclination being towards natural philosophy and chemistry.

When near his majority he left the farm to prepare for college, refusing financial aid from home. He said to his father: "You have enough to do to give the other children a good education; *I* can work my own way." And he did, through nine years spent in securing such a varied, practical education as to place him among the foremost scholars of his time.

Mr. Judd was given the *American Agriculturist* (which he edited for 30 years) when it had but 812 subscribers, and under his wise and efficient management it became very popular, and its regular circulation ran up to over 160,000 early in the '60's.

The International Sunday School Lesson System was originated by Mr. Judd, which now is used the world over, and which is such a splendid help to bible study.

The Crop Reporting percentage system now used by the General Government and State bureaus, was devised and wholly carried on by Mr. Judd for two years, when the Agricultural Bureau at Washington was induced to take up the work. A tardy but much-merited recognition of his work in this line recently appeared in a Government document.

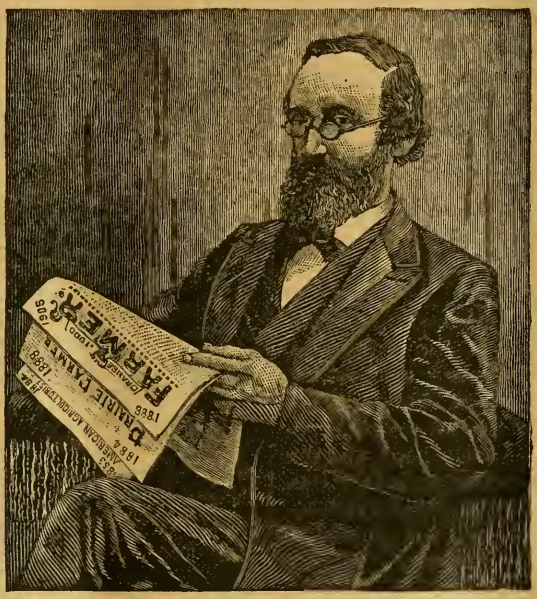
He was usually fortunate and successful in securing good lieutenants in his various departments of business and enterprises, so that he always had time and energy for some new work. He has found time since 1850 to visit and describe in part portions of every State and Territory in the Union, except Oregon, Washington, Nevada and Alaska; also all the countries of Europe except Norway, Spain, Portugal, Turkey and Greece. His numerous letters and essays on "Who Should Go West, When, Where and How?" were re-published millions of times by others, and contributed much to the rapid settlement of Iowa, Kansas, Nebraska, etc. His scientific explanations of the utility of irrigation were highly valued, and much re-published in the arid States and Territories.

Mr. Judd's great interest in educational matters is well known, and his co-operation and means, erected the "Orange Judd Hall of Natural Sciences," presented to his Alma Mater, which, at the time of its dedication in 1870, was one of the most perfect and commodious structures of the kind in the country. This, Mr. Judd often says, is the most pleasing and profitable investment he ever made; says it pays him *now* a very

large annual interest in the satisfaction of seeing its benefits to large numbers. If he received this in money, it could in no way afford so good and *satisfactory* returns. He recently remarked: "Oh, I'm rich enough. I have a home, small, but large enough for me, and as good clothes as I care for, just the kind of simple food which is best for me, and plenty of friends. Vanderbilt has no more, and I have not his care and anxiety."

The Alumni Record of his alma mater began in 1850, and first published in 1859, is a model of its kind. The last edition (1883) is a large octavo volume of over 800 pages. The trustees value its usefulness to the university so much that they have provided for a series of decennial editions, the next of which, brought up to date, and probably much enlarged, will be issued in 1893.

During Gen. Grant's Presidency a unique provision was made to help remedy the disgraceful wrongs and outrages upon the Aborigines. The President was authorized by Congress to select and appoint for life half a dozen or more men known for their public work and philanthropy, etc., as a "United States Board of Indian Commissioners," to report directly to himself. They have been called the "President's Private Indian Cabinet." This Board supervise all letting of contracts and the quality of articles, also the payment of bills, and generally looking after the welfare of the Indians. Mr. Orange Judd was appointed as the "Agricultural Member," and continued until after his prostration in 1883, when he felt compelled to resign from longer service. In 1880 he spent 46 days at the Reservation along the upper Missouri, from Sioux City to 200 miles above the Yellowstone, investigated numerous wrongs and irregularities, and effected sundry changes in the methods of introducing farming implements, live stock, etc., among the Indians. His report to the President, a closely printed document of 61 pages,



Orange Judd's 70th Birthday Anniversary.

was of much influence in the Indian Bureau, especially as respects implements, farm operations, etc. He paved the way for the surrender of Sitting Bull and his band in the winter of 1880-81.

Mr. Judd's health was impaired by hard day and night work and exposure in the hospital camps, during the Virginia campaigns of 1863-64, as an active worker and assistant in the United States Sanitary Commission. He then imbibed the seeds of malarial disease which were ever after a source of trouble. In 1873 he organized his entire business in a Stock Company, to preserve its integrity in case of his death, and disposed of a considerable share of it to others, investing largely in real estate in and around New York, while we went with his family to Switzerland and elsewhere for a year's residence, where he partially recovered from the malarial infliction, but never quite so, even to this day.

The general financial crash during his absence in Europe, in the autumn of 1873, the mismanagement and outside speculations of those in charge of the old business, of which he remained as president and responsible head, and the continuous great decline in real estate largely diminished his "reserve" intended for his old age, and finally in 1883 the scheming of those in the business to get possession of it, and the failure of numerous parties whom Mr. Judd had aided financially, and whose notes he had endorsed to help keep them going, became a heavy load; and a sunstroke in May, 1883, which entirely incapaciated him for business during many months, all together swept away his accumulations; except, as he says, "What I have given away is secure; is yielding a large income to me in satisfaction in seeing it useful to the present and coming generations."

This financial disaster, as it would seem to others, Mr. Judd claims was a blessing in disguise—a dark cloud, but with a bright "silver lining;" and after fully recovering from the effects of the sunstroke, he lost no time in resuming his journey (of 31 years previous) to Chicago, with his sons fully educated and prepared for activity in the great, growing West, which their father believed was the best field for them in which to enter upon their life work. Mr. Judd feels that during the past eight years he has, in his profession, done more and better work for the country than in any previous period twice as long, and he has no other idea than to *keep at it* a long time yet—how many more years, he is not anxious to forecast.

In the foregoing we have endeavored to recapitulate some of the great things which Mr. Orange Judd has done for the good of his fellow men. In his declining years we hope he may not only have the consciousness of a "duty-done" life, but may also feel that present and future generations will revere his memory, emulate his noble example and self-sacrifice, and ever be grateful for the beneficent influence of such a well-spent life.

Bee-Keepers' Magazine, published at Winona, Minn., by Mr. A. K. Cooper, expects to be "on hand" again with the October number. The last issue was for June. Mr. C. says he will have a "nicer looking paper" then, and "may reduce it in size to the standard, 6x9 inches." We wish him success, as we do all others interested in the advaucement of bee-literature. We may be jealous of some things, but we certainly are not jealous of any rival bee-publishers. We wish them all the prosperity they merit or desire.

The Southern and Texas bee-keepers will meet in special session on Oct. 27th, during the Dallas. Tex., Fair and Exposition. It is hoped that there may be a general attendance of the bee-keepers of the South.

IN SUNNY SOUTHLAND.

CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Introducing Queens.

As quite a number have asked the *best* method of introducing queens, I will here say that I hardly know which way is best, but, as I have been quite successful in the last five years, not losing a single queen that I now remember of, I will give my plans.

The first is the "candy plan;" but I do not like the directions that go out with the candy plan. I first know that my hive is queenless, then I lay the cage on the frames, wire downward, remove the tin from the candy end of cage, and let them severely alone for *one week*, and I always find the queen out and laying.

A great number of queens lost by introducing, I am satisfied, is because the hive is opened too early. Put in the queen, and do not, under any circumstances, touch it for a week, is my advice.

Another good way is to keep the queen caged over hatching brood, and have no wire cloth on the cage. But as this is more trouble, we have not used it any this year. I would never make the colony queenless before putting in the new queen, as there is more danger in your leaving some little, dumpy cell in the hive that will hatch before the queen is released, than there is in putting in the queen at the same operation the old one is removed. Then there is no danger of a queen hatching for 10 days, and by that time the introduced queen will be out all O. K. But, usually, the new queen is out and laying before the bees have time to start cells at all.

Of course, when the colony has become queenless by accident, you should give them a queen the first chance, but be sure they have no virgin or queen-cell, otherwise you will fail. Should I have one of those bad colonies to introduce a queen to, such as Mr. Doolittle speaks of, I would put the queen into the hive three days in the cage; I would take away *all brood*, and give them empty combs, or combs of honey. Then I would shake the bees all off the combs in front of the hive, and turn the queen loose with them, and as soon as they were all in I would shake them again, just as before, and then shut up the hive. In a few hours give them a frame of brood, and then let them alone.

Bees Leaving the Hive—Sumac.

On June 20th I placed an entrance-guard on the entrance of a colony that had a great many drones which I wanted to get rid of, and then shook the bees in front of the hive.

I soon noticed an Italian queen on the alighting-board, and as the bees which I was working with were blacks, I knew she was a stranger, and the bees seemed to know it, too, for they "balled" her at once. I succeeded in getting her out, but she flew away before I could get her caged, and I saw her no more.

I saw that some of the bees around the hive were yellow. This caused me to look around, and I soon found where the strange bees and queen came from. There was a weak colony a few yards away, and it was from this colony that the strangers came. Part of the bees went back to their own hive, but the queen did not return. I gave them a queen-cell, and in a short time they had a virgin queen, but it got lost before she was old enough to lay, The bees then came out and went to the hive that they went to before. What caused them to leave the first time, I do not know. They left the last time probably because they had no queen or brood with which to rear one.

A few days ago a weak colony swarmed out and settled on the ground. I was somewhat surprised to find a queen with them, for I had supposed that they were queenless, thinking this was the cause of leaving their hive. I put them back into their old hive (the queen did not get back), and they are there yet, and have built several queen-cells. When they came out they had considerable brood and some honey. When I put them back I gave them a frame of brood and honey, and as they have stayed all right since, I think they swarmed out because they had but very little honey, although there was plenty of nectar in the flowers.

Bees have gathered but very little surplus honey here this year. In the spring I had 4 strong colonies, and 2 that were very weak. I now have 7 colonies that are very strong, and 2 that are not very strong. My colony of Italians has done better than any of the

others. In the spring it was very weak, but now it is nearly as strong as the strongest, although I have divided it once, and drawn several frames of brood and honey, besides keeping it queenless about two weeks.

Sumac has been in bloom for several weeks, and the bees keep busy on it when the weather admits. There is a great deal of sumac around here, and it is spreading very fast. All that has to be done to raise a patch of it, is to clear off the ground—Nature does the rest. The sumac will soon sprout up all over the ground, and it will bloom when it is two or three years old. ED. CDARK.

Nat, Ala., Aug. 17, 1892.

QUERIES AND REPLIES.

When Should Honey be Extracted?

Query 836.—When should combs ordinarily be extracted—when just sealed over, partly sealed, or when sealed for some time, in order to get the largest financial returns?—Illinois.

When partly sealed.—E. FRANCE.

When partly sealed.—EUGENE SECOR.

When fairly well sealed.—A. B. MASON.

When just sealed over.—L. HARRISON.

When sealed over, or partly sealed.—J. P. H. BROWN.

Just after about all the cells are sealed over.—C. H. DIBBERN.

It depends upon circumstances. Long sealing is safe.—C. C. MILLER.

Combs are not sealed over until the honey is ripe enough to extract.—J. E. POND.

As soon as the honey is sufficiently ripened; honey does not always require being sealed entire.—J. M. HAMBAUGH.

It will depend upon your method of handling honey. I prefer to extract when it is well capped over.—H. D. CUTTING.

Extract when about one-third sealed, and keep in open vessels in a warm place for a short time.—MRS. J. N. HEATER.

The best honey comes from combs long sealed over; the best honey brings the best prices, and gives stability to our markets.—G. M. DOOLITTLE.

I prefer to extract when the combs are just sealed over. I do not always wait until all the cells are sealed, but I want them ready to seal.—M. MAHIN.

The best way is to have plenty of combs, so that you can leave the honey in them until it is fully sealed and thoroughly ripened.—JAMES A. GREEN.

If the bees have *plenty* of comb room in which to distribute their nectar for evaporation, I prefer to remove the combs when partly sealed.—R. L. TAYLOR.

Sealing has nothing to do with ripening. Extract when the honey has been a week or more in the hive. It is then probably ripe, whether sealed or not.—DADANT & SON.

Just as the bees commence to seal them, I think. Circumstances might make it more profitable to add extra hives, and let them cap all; and then extract after the season was over. Each person can best judge, as he knows how his time is to be employed.—A. J. COOK.

As the quality of extracted honey in making sales must affect the "financial returns," it is manifest that the honey should be well ripened before extracting. The best time is therefore soon after the combs are sealed.—G. L. TINKER.

Much depends upon the season and disposition of the bees, and much more upon your system of management. For 20 years we have used shallow supers and the tiering system, and when rightly used "partly capped" is enough to warrant ripe, rich honey.—JAMES HEDDON.

In order to get the most honey, better extract when the bees begin to seal the combs; and I think in this locality the largest financial returns are derived from extracting almost as fast as the bees fill the combs, for honey does not always have to be capped here to be ripe, as our bees often bring in thick, ripe honey from the fields in dry seasons.—MRS. JENNIE ATCHLEY.

If you have a good supply of combs to give the bees full room to store honey while they evaporate and seal that which has been stored, you will save *time* and labor by going over the yard not more than twice to take the whole crop. And then you will have an article that you will be proud of. Honey that is taken when thin and watery, no matter what you do to it afterward, is little more than syrup. It is an inferior stuff, that ought not to be recognized as honey.—G. W. DEMAREE.

The main point to consider is, Should the honey be extracted before it is ripe? The BEE JOURNAL has always advised bee-keepers never to extract honey until it is ripe. When it has been gathered 8 or 10 days, it is safe to extract it, whether it is capped or not, for it would probably then be ripe. Ripe honey is best, brings the best price, and will therefore secure "the largest financial returns."—EDITORS.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Difference Between Italians and Blacks.

JAS. F. WOOD.

In the following article I shall endeavor to show the vast difference (in different localities) between the Italian bee and our common black and hybrid bees; also the propensity of the Italians to swarm when blacks refuse to do so under the same circumstances. As a breeder of Italians, perhaps what I have to say in favor of black bees will be read with interest; on the other hand I shall not enumerate the superior qualities of the Italians, as I believe we are reminded of them in print often enough by other persons than myself.

First, we will look at my own locality, and a careful comparison of the two races side by side for 16 years during good, and still oftener poor, seasons shows very little difference, if any, in favor of either race. I might add, I have not kept any black bees for five or six years, so I have had no experience during this time, although the honey resources grow less and less each year, so I consider further tests in my location of no value.

Next we will go to a location only 4 miles from my home (the apiary nearest my own). Here there is a continuous honey-flow from the opening of fruit-bloom until late in September; but remember it is only very moderate until September, when golden-rod and asters yield profusely. All the months of June, July and August the bees will gain just enough so we can barely see from one week to another that there is a trifle more honey. But, O my! you would be surprised to see what a single colony of Italians will amount to by the way of increase. They will swarm usually three times, then in August, and often in September the old colony will cast another swarm, while the first and second swarms often will cast swarms. I have known swarms as late as Sept. 3rd to gather enough to winter, and one good colony to increase to 10 by natural swarming, without the use of foundation or combs.

In this locality I have tested many different strains of Italians, some said to be "non-swarmers," but the result is invariably the same with all Italians in this locality, even the strain that gave me such large yields of honey in New York, and never attempted to swarm, became as others in this location, simply because the room in the brood-chamber was continually filled with brood instead of being crowded with honey, and consequently more bees are bred.

Now compare the black bees with the Italians in this locality. They will swarm twice, usually, if they have their own way (which they usually do), and there is no more swarming at all, but of course the hives are crowded to overflowing with bees, and when the fall honey-flow begins, these blacks will fill a super full of honey, while the Italians are in no condition to store surplus, as they are so reduced by swarming during August. The last swarm issued Aug. 19th, this year, and to-day have filled a hive of empty comb with brood and honey. Now, do you wonder that this man declares that the black bees are the best? Surely, he gets his honey from them, and not a pound of surplus from his Italians, which I so kindly gave him.

When I resided in New York, where buckwheat and sweet clover were both abundant, I found at the close of the season that the Italians had stored honey gathered from sweet clover, while the blacks gathered largely from buckwheat, and not so large a yield per colony. I had about 100 colonies of Italians and 50 colonies of blacks, and the difference in yield and the value of the clover honey over the buckwheat amounted to about $1.00 per colony in favor of the Italians. In this location the blacks swarmed much more than did Italians—indeed, the Italians swarmed very little the two seasons I resided there. Do you wonder that a man in this location declares Italians the superior bees?

Now I have come to the conlusion that there are locations where hybrid or black bees will gather more honey than other Italians, especially is this true where dark honey of poor quality is gathered. I think this applies to the location of W. L. Coggshall, of New York, and other extensive honey producers who find the hybrid bees give best results in dollars and cents. Mr. Coggshall lives in a locality where buckwheat is of great value, and it has been my experience in many different locations to observe that hybrid bees are equal to any bees (and I sometimes think superior) to work a buckwheat field. Hence, we find such bees in Cen-

tral New York to the exclusion of Italians.

I think that when we are liberal and broad-minded enough to take in the different locations of this great country, and make allowance for the man whose bees swarm continually, and the other whose bees do not swarm at all, and advertises non-swarmers, that we can look upon the latter as honest, while the former cannot, after trying his bees only to find them swarming as much as do his own. It is difference in location, friends, and not in the "strain" of bees.

North Prescott, Mass., Aug. 26, 1892.

Freeing a Colony from Laying Workers.

J. F. LATHAM.

I have a method for getting rid of laying workers, when I do not wish to introduce a fertile queen, that I have not seen described in the AMERICAN BEE JOURNAL.

I first remove, as the magnitude of the abnormality requires, from two to four combs, containing the most drone-brood, from the brood apartment, and insert in the center of the hive the same number of combs from other colonies well-stocked with eggs and worker-brood and adhering bees. I then shave the heads from the drone-brood in the combs taken from the colony having the laying workers, and distribute them among the colonies from which I took the worker-brood. This done, I shave the heads from the drones in the combs remaining in the hive having the laying workers, and place them outside of the combs which I inserted—in reality forming a strong nucleus with the old bees of the colony as auxiliaries.

The evidence of abnormality will soon disappear, and, if outside conditions are favorable, the colony will manifest an interest in the change by rearing queens, and preparing to again assume its normal routine.

The foregoing-described process will not be applicable later than the middle or later part of July, in this latitude, and then the colony should be fed during the interim from clover to the fall bloom, which is about four weeks in this locality.

Should the colony fail in their efforts to obtain a queen, the bee-keeper can furnish it with a queen, or unite it with a colony having a fecundated queen, as may be thought judicious.

West Cumberland, Me.

Do Bees Hear ?—Introducing Queens.

C. E. MEAD.

All the evidence affirms that they do. Probably the first evidence a beginner sees of this is in hiving a swarm of bees. As soon as a part have found the hive, they start the glad hum, and though most of the swarm may be in the air, or some feet away from the hive, they all come with a rush to their new home.

Notice the guards in front of the hive, and see on the approach of a big fly, hornet or humble-bee, one will give a sharp, short buzz of alarm, and all the "soldier bees" on guard will be instantly on the alert.

Place your finger-tip on a loaded worker, enough to detain it, not to hurt it; it will give a buzz of fear, the soldiers will come to its rescue, and it is well to let it go. There is the buzz of alarm when you drum up a swarm, or blow smoke into a hive; the peculiar hum of swarming bees; and the hum of satisfaction that bees on a brood-comb sometimes give on being returned to the hive.

About a week ago I saw a virgin queen come out and fly away. She did not seem to mark the hive very well. Instantly the nucleus was on the alert, and bees flew in all directions. In about eight minutes she came back, and three bees with her. As soon as the queen had entered the hive, they began a peculiar hum, and all returned to the nucleus. Some bees went to the entrance of the hive nearest the nucleus, and returned as soon as she returned. I saw this repeated several times. Each time the bees seemed to sally out to conduct her home.

The sound of a queen's flight is unlike that of a worker or drone. Though her motions are short and erratic, like those of a drone (I am referring to a virgin queen), let one bee, inclined to be cross, come around you; if you are quiet, it usually leaves, but let another join it—instantly the hum of both strikes a higher key. Look out, or they will strike you. I do not think this is due to the smell of each other's venom, but to hearing the threatening sound of each other's wings.

NUCLEUS FOR QUEEN INTRODUCTION.

I wished to introduce a queen at once. As honey was coming in, and the day was warm, I took this way of doing it, which I have not seen mentioned:

At 8 a.m. I took four frames of capped brood from as many different hives, being careful not to get a queen, and placed them in the nucleus hive. All the bees that had ever had a flight before, went back to the hives they were taken from.

After shaking the young bees in the nucleus hive, I returned all but one brood-comb, thus leaving only young bees. I placed the cage on the frames of the nucleus. The first bees that discovered the queen gave the glad hum; in half a minute all the bees had taken it up, and covered the cage. I gently pushed them away, so as to open the cage, and the queen deliberately walked out, all the workers facing her, and sticking out their tongues, offering her food. The next morning she was laying.

This ought not to be tried only when honey is coming in, and the day warm. Take all the young bees on each comb that you can. Now let those who care to, or have not already observed the few instances mentioned above, verify these observations.

Bees communicate by sound of wings, and express joy, anger and fear. They find a queen by the sound of her wings; they sound the alarm of her loss, and the joy of her being found.

Chicago, Ills., Aug. 1, 1892.

How Far Do Bees Fly?

FRANK BENTON.

Items under the above heading have been going the rounds of the papers, and the opinions expressed differ greatly, some claiming "that bees will not go farther than two or three miles," while others think the distance is greater, one even naming 12 miles as the limit.

After mentioning the fact that the bee makes 190 wing-strokes in a second, one of the items widely copied says that "scientists claim that 190 strokes per second would propel the bee forward at the rate of a mile per minute," and then that "conservative writers admit the bee's velocity to be at the rate of at least 30 miles per hour." The same writer then goes on to say: "Basing our calculations on the latter figures, and supposing that they can keep up for 20 minutes, no matter how heavily laden on the return trip, the rate of speed on the outgoing would take them 10 or 12 miles from the home line."

It is quite difficult to determine the rate of speed attained in flight by bees. Therefore, any computation of the distance they go after honey, which is based upon their supposed speed, is liable to great error. The number of wing-strokes per second, 190, as recorded above, was obtained by Prof. Marey by what is known as the "graphic method."

A bee was held so that when its wings were in motion one of them would strike very lightly the surface of a revolving cylinder covered with smooth paper slightly smoked, and at the same time a style fixed in the end of a tuning-fork was arranged to record on paper vibrations it makes per second, it was easy to compare the number of these actually recorded with the record of the bee's wing for the same time, and thus arrive at the number of strokes the bee makes in a second. It is evident, however, that the friction of the bee's wings against the paper must lessen somewhat the number the number of strokes, and indeed Prof. Marey observed that as he lessened this friction the velocity increased considerably.

If the note made by the bee's wings when she is in vigorous flight could be accurately determined, the corresponding number of vibrations required per second to produce that pitch would represent the wing-strokes made by the bee causing the sound. Dr. H. Landois thinks the note of a bee in full flight ranges from A to C of the first and second leger of the treble clef. This gives over 400 vibrations per second.

If, then, "190 strokes per second would propel the bee forward at the rate of a mile per minute" (a claim by no means to be accepted as proven), and if Landois has determined the note correctly, over 2 miles per minute would be the speed attained.

Conservative authorities are disposed to place the rate of speed attained by bees much below 30 miles per hour, even no more than 18 to 20 miles, and nothing is better recognized than that bees when fatigued, when flying from flower to flower, or when returning heavily laden to their hives, proceed far more slowly than when outward bound. Thus the calculation that they go 10 or 12 miles from home is plainly erroneous.

How difficult it is to determine their rate of speed, and hence however erroneous any calculations based upon such determinations may be, it is not at all difficult to tell practically how far bees actually do go after honey.

Apis mellifica has been introduced into regions where the species did not

exist before, and careful observations have been made regarding the range of its flight, and also the yellow varieties have been taken to countries or localities where only brown or black bees were found, and the dark varieties have been experimented with in regions where only yellow bees were natives. In this manner it has been readily and accurately determined that they generally work within a distance of 2 miles from their hives, although they will in rare instances go as far as 2 or 5 miles, and a resident of an island off the coast of Texas reported, several years ago, having followed his bees in a boat, and found them working on the mainland, a distance of 7 miles from their hives.

But no practical bee-keeper would expect favorable results from pasturage located over 3 miles from his apiary, and marked advantage can only be awaited when the honey-sources are located within 2 miles in a direct line from the apiary.—*Insect Life.*

Washington, D. C.

A Trip to Historic Mackinac.

HENRY K. STALEY.

When, according to the ancients, Canis Major or Sirius the Dog Star is in the ascendancy, the fields dry up under the scorching rays of the sun, the pores of humanity are opened, and the brackish sweat rolls forth, wetting the dirtiest rag to the most beautiful dress.

It is during these times, the dog days, that people with overworked brains, worn out and enervated bodies, and those afflicted with summer diseases, are wont to flee their homes in search of quietude and recreation, to watering-places and summer resorts. And this is what every bee-keeper should do, if he can possibly afford it, as well as the lawyer, doctor, merchant and thief, and leave behind him the cares and anxieties of life in oblivion, and, like De Soto and Ponce de Leon, search for some influence to invigorate and regenerate him, putting him in a fit attitude to again combat with the stern realities of life. 'Tis said,

"Life is short, and time is fleeting,
And our hearts like muffled drums
Are beating, funeral marches to the grave."

In view of this, it behooves us to take advantage of the extremely low railroad rates to these places of interest and recreation. But let me advise you, paradoxical as it may seem, the opinions of others to the contrary notwithstanding, *to first go alone.* By so doing you will soon be enabled to overcome all feeling of homesickness, gain experience, and be endowed with a self-reliance which I think can never be acquired by traveling in twos or more.

So, having purchased a $5.00 round-trip ticket to Detroit, I left

The Queen of the West, in her garlands decked,

at 9 a.m. on Aug. 25, 1892, headed for the "Fair City of the Strait." The rounceval iron-horse soon began to fly through the magnificent suburbs of Lockland, Wyoming, Carthage, Glendale and Cumminsville. We now roll into the Gem City amid confusion, where, after a short respite, we are flying through Northern Ohio.

"Whizzing o'er the mountain,
Buzzing o'er the vale;
Bless me! This is pleasant,
Riding on a rail."

That the "melancholy days have come, the saddest of the year," is attested by the acres of dried up and withered grass. Tippecanoe, Troy, Sidney and Piqua are soon left into our rear, and we are now sailing toward the tremendous oily resources, tanked and otherwise, of the Standard Oil Co. It is a grand sight as one comes into Lima, to see these hundreds of hundreds of red-painted tanks, holding within their circumferential areas, millions of gallons of crude oil, drawn from Nature's greasy springs.

No less interesting is it to see this crude oil refined. The first distillation gives off gasoline, the second benzine, the third petroleum or coal oil, the fourth headlight oil, and the fifth lubricating oils. Thousands of pounds of the residuum is made into coal tar, and lots of it goes into the chewing gums, for our fair damsels to smack their jaws upon in lieu of what they term the "filthy tobacco."

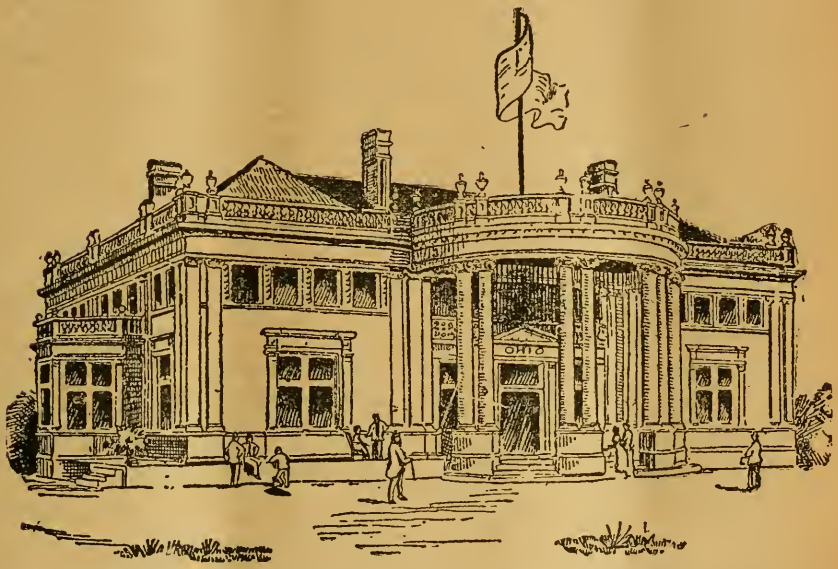
"Tobacco—'tis a nasty weed,
Which from the devil did proceed;
Smoke and chew, and burn your clothes,
And make a chimney of your nose."

These things are especially interesting to me, since I am an exponent of Forestry, because of the consciousness that all this oil that warms up our edificies by day, illuminates our houses by night, makes our buggies run easily, cooks our meals, cleans our printing presses, tars our ropes, and sets our upper and nether maxillaries in motion, must trace

its origin back to the magnificent forests of the geological carboniferous epoch.

Turpentine is the distillation of the sap drawn from the pine trees of North and South Carolina, while our rosin of commerce is the residue. Copal varnish is made from the hard gum of an extinct forest, only found in Australia about 8 feet beneath the surface soil. It requires about 750° of heat to melt it. Shellac varnish is made from the excrement, offal or dung of a fly that lives in Ceylon. When a person travels, I claim to make apiculture a grand and glorious industry.

But although President Harrison seems to glory in the fast decreasing wood area of the United States (when at Malone, N. Y., he said: "We have in large part completed our great works of internal improvement. *The forests have fallen before the axes of our pioneers*, and the plow now turns the soil of all that region which we once styled the 'far, great West'"), we should not shut our eyes and wink at the actual condi-



Ohio State Building at the World's Columbian Exposition, in 1893.

that, to use a vulgar word, he should use his "gall," and "nose around," and build up intellectually as well as physically.

We are now flying through the beautiful fields of Northern Ohio. The apiaries here, no doubt attributable to the energies of "A. I. R.," are quite numerous. The immaculate buckwheat fields stare us in the countenance, and we are constrained to believe that the raising of buckwheat could be carried on extensively and advantageously in the upper portion of the Buckeye State.

Bee-keepers, you have seen your lovely lindens swept from the soil; you have seen your farina-bearing, hard sugar maples turned into lasts, and now it should behoove each and every one of you to do your uttermost to secure the extensive planting of buckwheat, so as tion of affairs, but—remembering that with the upbuilding of the forests, saccharine and otherwise, apiculture will surely augment itself and become a grander and more powerful industry—plant, plant, plant; and what? TREES.

Well, Toledo, lying on the shallow shores of the deceptive Lake Erie, we now enter, where a Michigan Central locomotive stands waiting to carry us on. After replenishing the inner man, we are sailing through the Peninsular State toward Detroit. The train pulls up at her nice depot in a drizzling rain. After having my satchel checked—this is a good thing to do when you are are in a strange city—I started out to hunt hotel accommodations. Did I succeed? Well ——Detroit seemed to be crowded to her uttermost, and I thought that in this wise it was one of the most damnable

cities I ever struck on the face of the earth.

Weary, tired and disgustified, I made up my mind then and there to leave the city. So I went down to the foot of Wayne street, bought a round-trip ticket for $7.00 to Mackinac, and slept on board the handsome ship "City of Alpena" for the night.

After having partaken of a salutary breakfast on the boat the next morning, and witnessed the exciting scenes incident to departure, we were soon sailing up the bluish-green water of the Detroit river. The quaint old town of Windsor, Canada, is on our right, while the famous and world-renowned Belle Isle, lit up by electric tower lighting, we pass on the left. We are now in placid Lake St. Clair, while the picturesque St. Clair Flats are seen in the distance. This vista must be seen to be appreciated. For miles boating houses, summer resorts and hotels are seen on stilts and piles on the American side, while on the Canuck's hardly anything is scarcely visible. This is hard to believe, but nevertheless it is true.

Here we are now going through the far-famed governmental ship-canal soon to emerge in the St. Clair river. The towns of Marine City, St. Clair and Oakland are soon passed, and we find ourselves launched to the dock at Port Huron. Here are numerous small boys vending their wares of buttered popcorn and roasted peanuts. We are informed that Lake Huron is rough, but after the roustabouts have performed their duties, we cast off and are ready to face the music of the waves.

Have you ever seen a mother for the first time nursing and rocking her first born? Imagine then, this huge ship, as she sang lullabyes to those who for the first time were on board a rough sea. She soon began to play "rock-a-bye baby" on the deep, and I noticed that many people began to hie to their staterooms and berths, and a foul odor began to pervade the cabin, and people began to walk intoxicated, and I soon came to the conclusion that Emesis began to reign supreme, "monarch of all he surveyed."

So I stayed near the railing of the boat, filling my lungs with the cool, refreshing oxygen, and inhaling the beneficial oozone of the lake, expriencing all the while a queer sensation in my abdominal head-quarters—but further than that I encountered no serious obstacles.

Being tired out, I soon consigned my little body into the somniferous embrace of the goddess of sleep, and there nestling on her nigrescent bosom, I began to doze, when, bang! bang! kerchug! Heavens! what's that?

To be a little explanatory, I will say that there are two berths in each room—an upper and a lower. By paying $1.50 you secure the lower and the right to the key, while the upper costs one dollar, but then you are dependent upon the purchaser of the lower to get in and out. This is a most execrable arrangement, yet it is so. Turning over I unlocked the door, when in strutted an unbeknown stranger to me, who, disrobing, leaped up into the upper berth. Well, confound it, Sullivan-like, I felt like taking the clerk of that ship and breaking his face—but these are some of the tit-bits of traveling alone.

About 2 a.m. the rumbling and grumbling of trucks informed me of the fact that we were at Oscoda, a lumber town of Michigan. But albeit I vowed on my down trip to stay in the cabin all night rather than sleep with somebody else, the sights I saw next morning more than made up for the inconveniences I experienced in that hour of night, the keystone.

Old Sol shining on the calm waters to our right made the lake appear like a huge flock of gregarious cow-birds, flopping argentiferous wings, while 18 miles distant in the horizon, the curling smoke finding its way heavenward above the "City of Alpena," was a sight so grand, glorious and soul-inspiring I am convinced could not be effaced from off the black-board of my memory, by the combined strength of all the tutors and professors that ever enjoyed the light of day.

Alpena is a strictly lumbering town. Here is abundance, and hence profligacy. Refuse burners signify it. But already they are feeling the gnawing rat. Forests are not of mushroom growth, but require that of generations, and the question is being debated, What will become of these towns that draw their nutriment entirely from lumber resources, when the forests are cut away?

The land does not seem to be fit for agriculture, and I cannot help saying to these deluded people, What became of the kingly, superb and magnificent city of Nantucket when the never-ceasing bar appeared at the entrance of the harbor? Their salvation, commercially speaking, is only to be found in forestry.

Acres and acres of logs floating on the lake, towed along by a little tug, is no uncommon sight. The outside logs are

well-picked ones, chained one to the other, thus forming a ligneous cordon around the mast of logs inside. A man away out in the distance may be seen tramping from log to log that none get away, just as a watermelon raiser watches his patch with a trusty Winchester.

Cheboygan is finally reached, and then away off in the distance Plank's Grand Hotel looms up with its wonderful colonnaded portico, while high on the hill white-washed Ft. Mackinac stares us in the face, and about 5 p.m. we step on the dock and register at the New Mackinac.

This is a busy little town at this season of the year. Although possessing a normal population of but about 490 souls, it is no uncommon thing for 5,000 or 6,000 strangers to be on the island at once. The island comprises, in round numbers, 2,000 acres, while 900 have been converted into a National Park. This is a busy little place with boats coming and going, curiosity shops galore, while a galaxy of loud-mouthed carriage drivers, infernally yelling, are seen near the dock.

There is a great deal of sociability here, and the young ladies in their attire of silk and crepon—Ges Creep-on—with their dear, little footsie-tooties encased in slippers of snowy immaculateness, are figures that go gliding back and forth to the cottages and hotels, thus relieving the monotony.

Sunday I found that pecuniarily I was'nt "in it;" that by going above Detroit my eyes were bigger than my mouth, that I had bit off more than I could chew. So I tried to unravel the knot, but soon found it to be a Gordian one, and gave up in despair.

In the first place, I knew that the only way I could get money in time was *via* telegraph, waiving identification. But lo, and behold you, when I inquired about Kennedy, Ohio—the nearest telegraph station to Pleasant Ridge—on this score, I found it was no money order station, and myself deep as ever in the soup. My condition was ridiculous, knowing that at one time my uncle was Mayor of Cincinnati, my father Treasurer of Hamilton county, and my grandfather Sheriff, and myself—not able to obtain a cent of money. Having paid my board bill, I had just 78 cents left, and determined to eke that out until I struck Dayton, O., the land of my birth.

Being no Mason or Odd Fellow, I could not apply to any source like that for aid, but I feel confident if I had known the address of any bee-keeper I could have easily secured the loan of money. At 10 a.m. I went aboard the "City of Mackinac," and found that I had 50 cents to spend for breakfast the next morning, and 28 cents for popcorn and "Yucatan." By eating popcorn and swallowing Yucatan spit, I managed to stave off hunger the rest of that day. The boat was crowded on account of people going to the International Fair at Detroit, and not being able to buy a berth, I stretched myself out on three chairs in the cabin, and slept the best way I could.

Arising at 4 the next morning, I was struck with the saying that half of the world don't know how the other half lives. Here they were in a conglomerate mass, scattered about on cots, chairs, and the floors; men lying here and babies there, like hogs, while I had to pick my way over their bodies to the lavatory. O how I did wish I could get one of those millionaires out of his berth and pummel him in his "bay window." But not being an advocate of Henry Georgeism, I indulged in no fistic exhibitions.

That morning I played the epicurean, eating as much as I could so as to hold out for the rest of the day. I arrived in Detroit hungry as a wolf, with but *3 cents* in my pocket, and as I promenaded up Michigan avenue, I could not help laughing at the ridiculousness of it, as bakery stores and groceries never seemed so plentiful before, when I had but 3 cents "in my inside pocket, don't yer know?"

But making the best of it, I invested in three sugar rolls, which I devoured with great gusto, and then found myself 261 miles from home, without a solitary copper. So as soon as possible I boarded the train, half frozen during the night, as I could get no berth, and about 4:30 in the morning I arrived at Dayton, O., after a most eventful and never-to-be-forgotten trip, with a sharpened appetite for breakfast. Never before did the land of my birth seem "the fairest, the dearest, the brightest on earth," as it did that morning.

Now, brother bee-keepers, when you contemplate taking a journey, follow the advice of David Crocket, "Look before you leap." Travel at first by yourself, and you will soon have "gall" and self-reliance that will surprise you. But after you have been initiated in the experiences of traveling, it will pay you to journey with a companion, as you will find it 100 times more congenial. Read

this trip well, so that you will know what you will have to encounter if you attend the World's Fair, for I don't want you to borrow money from dear, old, brother York until you bankrupt him, and thus make the "old reliable" AMERICAN BEE JOURNAL a thing of the past.

Pleasant Ridge, Ohio.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel,Wis.
Edwin Pike, Pres., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

SELECTIONS FROM OUR LETTER BOX

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Heaviest Flow in 6 Years—Smoking.

The heaviest honey-flow of six years has been and is still upon us. How I long for my 50 colonies back again. Manipulate frames as I may, I cannot get the queens to lay well. The workers choke them down with honey.

The *Bee-Keepers' Review* has been "smoking" for two months, and not one of you fellows would throw a cup of cold water on it! Is this what you call "editorial good-will?"

JAMES HAMILTON.

Beason, Ills., Sept. 5, 1892.

[Of course if a bee-paper *wants* to smoke, why we will have to let it smoke—we don't see any way to prevent it. Now, if it had been the *editor* smoking instead of *the paper*, Bro. Root and the writer (G. W. Y.) would have felt called upon to try to induce him to give up the useless and injurious habit. But bee-keepers, as a rule, we think smoke only when having a bee-smoker in their hands. That is the only "proper" way to do—then the sisters can enjoy it, too.]

The Honey-Flow at Last.

Bees have not made a living for two months, but now you ought to see my golden Italians roll in the Spanish-needle honey. I think my best colony will store 50 pounds of surplus from that plant. JAMES W. S. RUPE.

Mt. Vernon, Ills., Sept. 5, 1892.

Good Year in North Texas.

As this is my third years' experience with frame hives, it is to be supposed that I would come in as a beginner. Well, I began the season with 10 colonies of blacks, bought 6 of the same kind, and then it occurred to me to purchase Italians. I got 12 nuclei and queens. I increased to 50, and have doubled back to 40. I am doubling all old black colonies with the Italians. This is a good year in the north of Texas, as I have put the sections on twice, and the bees filled them well the first of the season with as nice white honey as one would wish to see. The latter is unquestionably honey-dew.

DAVID LETOT.

Letot, Texas, Aug. 29, 1892.

Queen Not Mated from Upper Story.

Allow me to reply to Mr. Doolittle's answer to my question on page 296. He says that unbeknown to me "there was a crack or hole in or about one of those upper stories large enough for the queen to go out and return, to meet the drones." Now, it is *known* to me that such was not the case, for the reason that there are no cracks or holes (but the regular ones) in my upper stories, or lower ones, that would allow a mosquito to pass through, as I do not belong to that class of bee-keepers. So that queen either passed out through the excluder and was fertilized, and went back the same way, or else she was fertilized in the super. JOHN MCKEON.

Dryden, N. Y., Sept. 5, 1892.

Have Done Extraordinarily Well.

My bees have done extraordinarily well this season. I have 35 colonies, and 31 of them are at work in the supers. I have extracted twice already from some of them, and I expect a large crop from broom-weed, which is beginning to bloom.

I could not afford to do without the BEE JOURNAL, as it is the most handy "tool" in my apiary. I read it carefully every week, and find that I am greatly benefited by it.

S. F. OZBURN.

Meridian, Tex., Sept. 5, 1892.

Lots of Buckwheat Honey.

I had 3 swarms to-day. My bees are getting lots of honey from buckwheat. There are hundreds of acres of it within reach of them. D. G. WEBSTER.

Blaine, Ills., Sept. 5, 1892.

Good Prospect for a Fall Crop.

Bees are doing finely. There is a good showing for a fall crop of honey. Bees did not swarm much. I have had 12 swarms from 39 colonies, spring count. I will report in full after I take off the surplus honey. SAMPSON STOUT.

Udall, Kans., Sept. 1, 1892.

Drone-Brood Poisonous to Chicks.

On page 182, I notice that Mr. Geo. Poindexter recommends educating chickens to catch drones. I do not suppose these "drone-traps" would make any distinction between drones and queens. Besides this objection, I want to say that the larvæ of moth make a nice morsel for chicks, but drones will scour the old birds and kill the young ones.

In the spring of 1891 I cut out half a peck of drone-cells, and, cutting off the caps, gave them to the fowls. The little chicks would greatly relish pulling the drones out of the cells. In a day or two though, I noticed many of the chicks drooping, and some died. I rarely lose a chick after I get it out of its shell, and did not like the condition of my young broods at all. I suspected the drone feeding, but decided to give them another trial or two, as there were disturbing causes. Last spring I had a brood of chicks a month or six weeks old off to themselves, and one day took from some combs a handful or two of drones of different ages—some could almost crawl; as usual the chicks devoured them. The next morning I noticed they were affected with the same symptoms as before observed. Half of them did not keep up with the old hen, and before night three of them had died. It took a week for the rest to recover. I must be doubly sure before I state a fact, and two weeks ago I tried only a few upon a small brood of chicks, and noticing the same effects, I wrote to Mrs. Atchley, of Texas, not to use drones for this purpose. Drones have no poison-sacs, and I am at a loss to know why they should poison chicks, and scour the old birds—but I am convinced that they will do it.

ARTHUR T. GOLDSBOROUGH.

Washington, D. C., Sept. 1, 1892.

Working on Buckwheat, Etc.

I put 50 colonies away last fall, and lost 2 in wintering and 7 by spring dwindling. I did not feed any, and all hives were empty of honey when the spring flow began. We had about a week's good flow of linden, when extremely hot, dry weather stopped the white clover and linden flows. I have now 63 colonies, with the bodies of the hives full, and the bees are now working on buckwheat and miscellaneous weeds, and are storing some honey in the supers. RICHARD HOPKINS.

Bear Grove, Iowa, Sept. 4, 1892.

COMBED AND EXTRACTED.

Honey as Medicine.

I do not think honey as an antidote for the ills that flesh is heir to, receives the attention it should. Pure liquid honey as an alleviator for sore, inflamed throats, has no equal. A lady who is a great sufferer in this way, keeps a glass of it on the stand by her bedside, and finds relief by taking a tea-spoonful of it whenever she awakens, as it both cleanses and relieves. Father Langstroth, dear to all lovers of the honey-bee, says that his wife was in Massachusetts a sufferer from consumption, and her friends and advisers thought she could not live to reach her home. She did, and then commenced to take

pure liquid honey, a tea-spoonful at a time, as often as she could receive it, night and day. She recovered and lived ten years, and then did not die of consumption. It is claimed that clover and basswood bloom is an alleviator for pulmonary difficulties, and why should not the nectar be more powerful? What can be more acceptable to a little child suffering from a cold or croup than pure liquid honey, when it naturally loves sweets?—MRS. L. HARRISON, in *Prairie Farmer.*

A Valuable Milk-Weed.

Mention is made in the "A B C of Bee-Culture" of the mischievous properties of *Asclepias cornuti* in gumming the feet of bees, and thereby disabling them; and the plant is, therefore, rightly condemned. The remarks justly apply to the variety in question; but a distinction should be made in favor of *Asclepias tuberosa*, which is one of the most valuable honey-plants of this vicinity, from the first to the middle of July. It is not chargeable with the mentioned objection of the other varieties, and is a rich honey-plant, furnishing a good quality of honey. It grows on sterile soil, and flourishes under conditions that would be fatal to most other honey-plants. Bee-men should not ignorantly cut it down. If they are not botanists, they may know it from the injurious varieties of milk-weed by its rich orange or scarlet-colored flowers, which are really ornamental, and from the fact that, when the leaves or plants are cut or broken, they show no milk exuding from the wound.—C. H. MURRAY, in *Gleanings.*

Lighting the Fire in Bee-Smokers.

We have one of the improved Bingham smokers, and I have used it almost entirely this summer. One thing I like about it very much is, that you can burn such long pieces of wood in it. We use apple wood a good deal as fuel, and it is excellent. As two of our apiaries are under apple-trees, it is very convenient to fill a smoker, when necessary, by simply breaking off a dead limb and breaking it in pieces small enough to go in a smoker. If a dense, sharp smoke is needed, we get a hot fire started, cut up some green apple wood, and what a very dense smoke it give us! This will work in either the Bingham or Clark.

We keep a box for holding shavings at each of the out apiaries, and although they are covered with tin covers, we did have trials the past extraordinarily wet spring in keeping the shavings dry. If you have never had any experience in starting a smoker with damp fuel, there is no use telling you about it. You could not appreciate it. A few live coals from the stove, or a piece of saltpeter wood, is a great help in lighting a smoker. I can hardly tell which smoker I like better, the Clark or the Bingham. They are both good. The Bingham is the more durable one, as it does not suck smoke back into the bellows. I think the Clark not quite so clumsy to handle, and I prefer it for driving bees out of several supers at a time, as it sends a stronger blast. — EMMA WILSON, in *Gleanings.*

Convention Notices.

COLORADO.—The Colorado State Bee-Keepers' Association will hold their "Honey-Day" in Longmont, Colo., on Sept. 28th, 1892.
Littleton, Colo. H. KNIGHT, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

Bee Journal Posters, printed in two colors, will be mailed free upon application. They may be used to advantage at Fairs over Bee and Honey Exhibits. We will send sample copies of the BEE JOURNAL to be used in connection with the Posters in securing subscribers. Write a week before the Fair, telling us where to send them. We would like to have a good agent at every Fair to be held this year. Here is a chance for a live man—or woman.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 383, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

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The Convention Hand-Book is very convenient at Bee-Conventions. It contains a Manual of Parliamentary Law and Rules of Order for Local Conventions; Constitution and By-Laws for a Local Society; Programme for a Convention, with subjects for discussion, and about 50 blank pages, to make notes upon. It is bound in cloth, and of the right size for the pocket. We will present a copy for one new subscriber to the BEE JOURNAL, with $1.00.

An Apiary Register is a splendid book to have in an apiary, so as to know all about any colony of bees at a moment's notice. It devotes two pages to each colony. We will send one large enough for 50 colonies, for $1.00, postpaid; for 100 colonies, for $1.25; or for 200 colonies, for $1.50. After using it for one season, you would not do without it.

The Premiums which we give for securing new subscribers to the AMERICAN BEE JOURNAL, are intended as pay for *work done* in getting new names among your friends and acquaintances, and are not offered to those who send in *their own* names as new subscribers, unless such name or names form a part of a club of at least three subscribers.

A Binder for preserving the copies of the AMERICAN BEE JOURNAL as it arrives from week to week, is very convenient. You should have one, as it is so handy for reference from time to time. We mail it for only 50 cents, or will give it as a premium for two new subscribers, with $2.00.

When Talking About Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we offer some excellent premiums that you ought to take advantage of.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	*Club.*
The American Bee Journal	$1 00	
and Gleanings in Bee-Culture	2 00	1 75
Bee-Keepers' Review	2 00	1 75
The Apiculturist	1 75	1 65
Bee-Keepers' Guide	1 50	1 40
American Bee-Keeper	1 50	1 40
Canadian Bee Journal	2 00	1 75
Nebraska Bee-Keeper	1 50	1 35
The 8 above-named papers	6 25	5 25
and Langstroth Revised (Dadant)	2 40	2 25
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Doolittle on Queen-Rearing	2 00	1 65
Bees and Honey (Newman)	2 00	1 75
Advanced Bee-Culture	1 50	1 40
Dzierzon's Bee-Book (cloth)	2 25	2 00
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Rural New Yorker	3 00	2 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Almost Every Bee-Book that is now published we mention on the second page of this issue of the BEE JOURNAL. Look over the list and select what you want. For every new yearly subscriber that you secure for us at $1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apiarian knowledge among your friends.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

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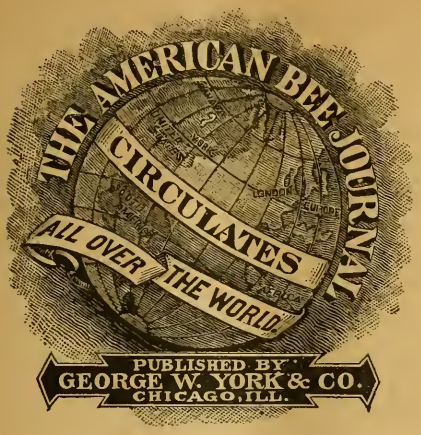
Be Sure to read offer on page 357.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.



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THOMAS G. NEWMAN, GEORGE W. YORK, } EDITORS.

Vol. XXX. Sept. 22, 1892. No. 13.

EDITORIAL BUZZINGS.

Help a Man out of trouble, and though he'll forget
Your kindness as soon as his trouble is o'er—
If ever again "in a hole" he should get,
Ah! then he will think of you kindly once more.

Sugar, for feeding bees, will cost more money hereafter. The quarantine has interfered with the importation of sugar, and the refiners have taken advantage of that fact and raised the prices. At this time, quotations are very unsteady and feverish. To-day a barrel of the best granulated sugar, containing from 300 to 350 pounds, will cost at wholesale price from 5¼ to 5½ cents per pound, and correspondingly more at retail. This will answer many queries sent to this office about the prospect for sugar quotations in the near future, as well as the prices for to-day.

Honey is Scarce this fall, and will no doubt be scarcer before winter is half over. It ought to bring a good price, especially if a good article. Those who are so fortunate as to have any honey to sell, will be doubly fortunate this year, because of the high price which it will command. One of those who give the market quotations in the BEE JOURNAL from time to time, has this to say in a letter received on Sept. 13, 1892:

We cannot get honey enough to supply our trade. So far we could fill every order received, but we have written to most of our shippers, and although we have always had honey on the way, it is very likely that we shall not have a barrel on hand before we know it. We could not afford to solicit sales for the last three months, but were always in danger of receiving orders that we could not fill. This is the time for bogus honey, such as Prof. Wiley talks about!

The present season is contrary to all our former experience. We could show our friends (who could bear testimony) at almost any time 100 to 500 barrels of honey, but we have not 30 barrels on hand to-day, and we can ship all to-day or to-morrow. So, you see, there is no over-stocking of the market this year.

The Illinois State Convention will meet at the Commercial Hotel in Chicago, Ills., on Tuesday and Wednesday, Oct. 18th and 19th, 1892. This will be during the dedication of the World's Fair buildings, when about one fare for the round trip will be expected on all the railroads centering in Chicago. There should be a large attendance of bee-keepers. Though the honey crop has been very meager again this year, there is nothing to prevent those attending this convention from having a grand good time socially, anyway. It is encouraging to meet together even if for nothing more than to exchange sympathies. Many a blessing and much inspiration can be had just out of that. Come, and help to bless your brother and sister bee-keeper by your presence and—cheerful sympathy.

Among the Callers at the BEE JOURNAL office the past week, and whom we were glad to see, were the following:

Rev. E. T. Abbott, of St. Joseph, Mo., who will have an interesting article in next week's BEE JOURNAL.

Mr. A. D. Webb, of Taylorville, Ills., who publishes a newspaper there. He has a few colonies of bees, more for pleasure than for profit—which may be the case with many in poor seasons. His bees are securing much honey from a species of smart-weed, commonly and erroneously called "heart's-ease." He reports a fair crop for his locality—Christian county.

Mr. Henry O. Morris, of Pueblo, Colo., who has 280 colonies of bees, and reports about half a crop this year. Sweet clover, alfalfa, and the Rocky Mountain bee-plant, or cleome, are the principal honey-yielders in his locality.

Mr. O. M. Morris, of Hebron, Ind., an old reader of the BEE JOURNAL, and Mr. H. C. Ahlers, who was on his way to his home in New Orleans, La.

We are glad to have our friends thus come in, and expect to see many of them next month at the Illinois State Convention.

The Wabash Valley Bee-Keepers' Association have succeeded in raising the list of premiums for 1892 at the Knox County, Indiana Fair from $6 to $200, and as they would like to keep it up to $200 hereafter, a cordial invitation is extended to all bee-keepers and supply dealers within reach of that Fair, to attend and make a display, and also take some of the premium money home with them. Parties wishing to exhibit will please write in regard to the space, etc., to Mr. Frank Vawter, Vincennes, Ind., the Secretary of the Wabash Valley Bee-Keepers' Association. The Fair will be held at Vincennes, on Oct. 10th to 15th, 1892.

Read S. F. & I. Trego's Advertisement.

BIOGRAPHICAL.

FRANCIS A. GEMMILL.

We take much pleasure in presenting to our readers this week, a sketch and portrait of Mr. F. A. Gemmill, of Stratford, Ont.—one of Canada's most prominent bee-keepers—which was written for the *Canadian Bee Journal* by Mr. Alex. Lamond, of Sarnia, Ont., and was published in May. It will be read with much interest not only by his fellow Canadians, but by his many friends on this side of the imaginary line that separates us.

Mr. Gemmill is now the honored President of the Ontario Bee-Keepers' Association, which makes him a particularly interesting personage, as the time for holding conventions is drawing very near. The following is the sketch of his life, referred to above:

Mr. Gemmill is a Scotch Canadian by birth, 46 years of age, his parents having settled in the County of Lanark, where they resided until they moved to Sarnia, County of Lambton, in 1854.

In 1863, at the age of 17, he became an enthusiast in apiculture, the result of his visits to an uncle, residing in the same place. Box-hives were the order of the day at that time, and "Quinby's Mysteries of Bee-Keeping" his principal text-book.

In February of 1864 he secured a copy of the third edition of "Langstroth, on the Hive and Honey-Bee," and as the Italian bee had been commanding considerable attention, as well as the movable-comb hive, he resolved to give both a trial. Accordingly, in June of that year, he had a swarm of native bees placed in one of the Langstroth observing hives, which, by the way, still remains in his apiary.

In the latter part of October he secured from Mr. Langstroth, by express, an Italian queen, paying the then moderate sum of $10 for her, the same

having been sold in the forepart of the season for $15 and $20 each. She was accordingly introduced, as per the instructions sent, but the result of the introduction was not known until the spring following, when he had the satisfaction of seeing young Italians disporting themselves on fine days in April.

The subject of our sketch has not been what is now termed "an extensive apiarist," never having owned more

FRANCIS A. GEMMILL.

than 75 colonies at any one time. Neither has he always kept bees from 1863 until the present time, as circumstances prevented his always remaining in the same locality; still he has never lost his old-time interest or enthusiasm for the pursuit, and was preparing himself to extend his sphere in this line, and establish a permanent out-apiary, when foul brood—the scourge of the apiarist—slightly manifested itself in his apiary in the fall of 1879; hence his action, combined with a few others, at the meeting of the Ontario Bee-Keepers' Association, held in Belleville, in January, 1890, urging the necessity of securing Legislation in regard to this disease, with good results, and also took a prominent part in the Act preventing the spraying of fruit trees while in bloom, now in force in Ontario.

Mr. Gemmill has used almost exclusively the eight-frame Langstroth, and latterly the New Heddon hive; and has wintered bees, with fair success, both out-doors and in the cellar. He thinks both methods have much to commend them. Cellar-wintered bees, in his estimation, should be protected in spring with packing, in order to secure the best results.

His present location, although an average one, is, he finds, over-stocked, there being within the city limits (Stratford) about 250 colonies. Notwithstanding this, he secures fair crops, but nevertheless is in the habit of moving his apiary some miles distant, in order to secure the benefit of a fall flow, which so far has been successful as to the amount of honey gathered, but he is not sure about the colony being benefited in the end; experience rather tending to show better results in wintering from colonies that have gathered no fall honey—buckwheat, however, is not included in the list of fall flowers.

Besides having done considerable at queen-rearing, he is a great lover of producing comb honey, but the late poor seasons have turned his attention more to the extracted article. Although not given to trying every new-fangled device, he is not slow in adopting some, merely because they are new, hence his preference for labor-saving apparatus, such as bee-escapes, etc., including a hive cart, *a la* Boardman, with some improvements considered of advantage in his special case.

In addition to the above he has been President of two local associations for a number of years in succession. He has also been a director of the Ontario Association for some time past, as well as

serving two years as Vice-President, and now occupies the position of President of this Association, having been appointed in January last.

That all should keep bees is not a hobby of his, unless they have some love for the pursuit, as well as adaptability, time and sufficient pluck to stick at it after once commencing. He has suggested that a season spent with a practical apiarist, or attending such a college as the one conducted by Prof. W. F. Clarke, of Guelph, a good way of teaching any contemplating a trial.

In conclusion: After having served his apprenticeship as a printer in his father's office, he followed the drug business for about ten years, but has for several years past occupied a position in the Civil Service. His family consists of wife, son of 15 (who, by the way, is no novice, and is also a great aid in the apiary, although a trifle backward in coming to the front under some circumstances), and a daughter of 12, who occasionally cages a queen when well paid for it. She thinks, however, her father can "roost" longer on a bee-hive than any other man under the sun.

Handling Farm Produce is the title of a neat, 20-page pamphlet by A. I. Root, which he sends free to all who ask for it. It contains a few hints and suggestions on the method of handling and marketing such farm and garden produce as Potatoes, Onions, Tomatoes, Cucumbers, etc., by the use of Bushel Boxes; with a description and price-list of various styles of boxes for farm use. It also has a chapter from "A B C of Potato Culture," and a list of other rural publications issued by Mr. Root. Send your name and address on a postal card for a copy of it. It's good—like everything else that comes from A. I. Root, of Medina, Ohio.

Seats for 125,000 people are to be provided in the great Manufactures building at the World's Fair for the dedication exercises on Oct. 21st.

The Iowa Bee-Lawsuits.—As promised on page 360 of last week's issue of the BEE JOURNAL, we present to our readers a full account of the lawsuits referred to. It is written by General Manager Thomas G. Newman, and reads as follows:

In Cascade, Iowa, there lives a man who is known by the name of John Foulkes, and he imagined that he was commissioned to oust the bees from that little "burgh." Accordingly he commenced suit against his two neighbors, who were keeping a few bees, to compel them to move the "little honey-gatherers"—that is, when there is any honey to be obtained from the flowers.

These two neighbors happened to belong to the National Bee-Keepers' Union, and as the members of the Union (as well as others) may be interested in the case, as General Manager I will recite the facts and extraordinary claims of Mr. Foulkes, as well as the decision of the Judge.

The two bee-keepers who were sued were Montgomery Wyrick and Isaac Hunter. They promptly notified me, as General Manager of the Union, and I engaged Attorney Alphons Matthews to attend to the matter. The cases came up for hearing on Aug. 4th, and, by agreement, they were submitted to the Court on *ex-parte* affidavits, which were numerous on each side. The cases were finally submitted to the Court on Aug. 26, and on Thursday, Sept. 1st, Judge Lenehan issued an order refusing to grant temporary injunctions, and continuing the cases, for final hearing, at the coming term, on the question whether permanent injunctions should issue on such further showing as the plaintiff may be able to make.

Of course this practically decides the whole matter, for if on *ex-parte* testimony the plaintiff could not make a case strong enough to win, he cannot hope to do so, when on a final hearing, a chance is given to cross-examine the witnesses and sift the testimony. If he

failed with *ex-parte* affidavits, he certainly cannot win when the defendant's attorney gets after him and his witnesses.

Here is an extract from a Dubuque paper of Sept. 2nd, the reading of which will cause bee-keepers to smile audibly:

THE BUSY LITTLE BEE MAY FLOURISH UNMOLESTED BY THE LAW.

Judge Lenehan retired from the bench of the District Court yesterday, and will hereafter devote his time to the business of the law firm of Lyon & Lenehan.

One of the last acts of the retiring Judge was the filing of decisions in the cases brought by John Foulkes against Montgomery Wyrick and Isaac Hunter. All the parties live in Cascade, and the plaintiff's residence is situated between those of the defendants, each of whom is engaged in bee-keeping.

Mr. Foulkes claimed that the swarms of bees were a dreadful nuisance, and made his life miserable. Among other things he claimed that the bees were so thick that as they swarmed around his premises they shut off the light of day, and kept his house in darkness.

Through Attorneys Welch & Welch, of Monticello, he filed applications for injunctions to restrain Messrs. Wyrick and Hunter from maintaining their beehives.

The case was submitted on affidavits Aug. 4th, Attorney Alphons Matthews representing the defendants. Depositions from a large number of Cascade people were taken under consideration by Judge Lenehan, and Thursday he filed decisions denying the applications of plaintiffs.

The opinion says that the defendants have been engaged in the keeping of bees for many years past, and that an injunction would deprive them of a source of livelihood in a business which the courts recognize as legal.

It is understood that the National Bee-Keepers' Association took up the fight in behalf of Messrs. Wyrick and Hunter.

Just think of the naughty bees swarming so thickly around the premises of Mr. Foulkes as to *shut out the light of day, and keep his house in darkness!*

I should think there would be *fun* in that court room when Attorney Matthews gets after the testimony on that point!

What a wonderfully diminutive house the Foulkes mansion must be if a few bees can keep it in darkness, and "shut off the light of day!" But perhaps the bees stung him near the eyes, and in that way "shut off the light of day" for him personally! This is about on a par with the case where one fellow testified that the bees ate up his peaches, and made a meal of his young ducks!

The community, the Judge and the lawyers have all been dosed with copies of the "Decision of the Supreme Court of Arkansas," which decided that bees were not *per se* a nuisance. It is a fact that wherever that document goes, it is a sure cure for the persecution, waged by ignorance and jealousy, against our pets—the bees. Decisions like that form a "bulwark of defense" like the rock of Gibraltar, which seems stronger than ever after having been lashed by the waves of the mighty Ocean.

THOMAS G. NEWMAN,
General Manager of N. B.-K. Union.

The Allegany County Bee-Keepers' Association of New York State was organized on Sept. 7, 1892, with 23 charter members. The following were elected as officers: President, H. C. Farnum, of Transit Bridge; Secretary, H. L. Dewight, of Friendship; and Treasurer, Herbert Spring, of Belvidere. The next meeting will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m., on Monday, Nov. 28, 1892, to which all bee-keepers are invited. We bespeak for this new organization the prosperity which always attends the earnest and constant efforts on the part of the members of such bodies.

Carl Hagenbeck, the celebrated German collector and tamer of wild animals, is in Chicago to arrange for the extensive zoological exhibit which he will make in Midway Plaisance at the World's Fair. He will exhibit lions, tigers, panthers, leopards, bears, monkeys, etc., in great numbers, and will show the largest "happy family" ever seen.

IN SUNNY SOUTHLAND.

CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

A Queen-Rearing Dialogue.

"Good morning, Mrs. Atchley. What are you going to do with those wax-cups you are dipping there?"

Well, Charles, these are the Doolittle queen-cell cups we read about.

"What are you putting them on that comb for, when Doolittle says put them on sticks?"

Charles, you see the weather is cooler now, and we find by sticking these cell-cups right on the sealed brood, the bees accept and finish them up better.

"How do you make them stick on the brood?"

Don't you see? Now just watch me. You see the cups are dipped stout at the base, or dipped times enough to form a *good* lump of wax, so I can handle them without injury. Now, I just press them down firm on the sealed brood, that way, with the tip of the cell standing a little off from the comb, that way.

"What is that you are putting into these cell-cups?"

That is royal jelly, or food prepared by the bees to rear a queen with, and for the want of a better name we call it "royal jelly."

"Where do you get the royal jelly?

Don't you see Willie caging queens yonder?

"Yes."

Well, we let these nuclei remain queenless for three days before we give them another cell, and then they are sure not to tear the cell down. By this time these nuclei have all started queen-cells, and you see Amanda yonder, going from hive to hive as if she were picking pears?

"Yes."

She is taking out the larvæ from the cells those nuclei have started, and with a little spoon made for the purpose, we call a "royal jelly spoon," she dips the jelly from those cells in the nuclei, and puts it into little boxes like this. So you see where we get most of our royal jelly. You can take the jelly from any place where the bees have started cells.

"Are you having your cells built in upper stories over colonies having a laying queen, as Doolittle does?"

No; we have ours all built in queenless colonies this year, in lower stories, as the other is too slow, and rather more uncertain than having them built in queenless colonies. We *know* that these queenless colonies will accept and finish up a good lot every time, for they are very strong.

"Where do you get these strong queenless colonies, all the time? Don't they keep running down, and become weak, and 'no good?'"

No, no. You see I have selected 10 good, prolific queens whose progeny are good cell-builders. And you see those 20 hives yonder, by themselves?

"Yes."

Well, that is my "cell-building apiary." On first starting I made 10 of them queenless, letting the other 10 lay on until my first batch of cells came off; then I take those 10 select cell-building queens out, and just turn them loose in the queenless 10 that have just completed cells, and they never stop laying; by this time the brood is beginning to hatch out, and these queens at once fill the hives full of brood again. Then I give to the queenless 10 about 20 cell-cups after three days, and they usually finish up about a dozen each, on an average. Then when these get "ripe," as we call it, we take them out and give them their laying queens back, and start cells again as before, and *vice versa*. If at any time we see these colonies giving way, we slip in a frame of hatching bees from other colonies, and I tell you this works like a charm, and our cells are all built in full colonies.

"There, now, Mrs. Atchley, let me stop you to ask were you get the larvæ you are putting into those queen-cups?"

Just come here, Charles, and I will show you by opening "Old Pet's" hive. (That is the name of one of the five-banded breeders.) Now you see this is a very strong colony; but you see this queen-excluding division-board?

"Yes."

Well, Old Pet is kept over on this side with only three frames, and this side is kept up with brood from other sources.

"What is that all for?"

I will try to tell you. You understand Old Pet is very prolific, and a fine select breeder, and should I let her have her own way, and full access to the whole hive, she would soon lay herself to death, or lay her eggs all out; and by keeping her penned off here, I let her lay only about enough for my needs;

hence, she will live 4 or 5 years. Now you set this middle frame on her side in a frame of new foundation. Do you see how nice the bees are drawing it out? And do you see how full of eggs it is?

"Yes, yes."

Here I get the young larvæ. I cut out a piece of this new comb that contains larvæ about one day old from the egg, and shave the cells down close so that I can get the larvæ out easy. Now this is *where* and *how* I get my queen-larvæ, and there will be reared about 2,000 queens from "Pet" this year.

(To be continued.)

Migratory Bee-Keeping, Etc.

The following I find in *Gleanings*, from one of our noted Southern bee-keepers:

Migratory bee-keeping seems to be quite popular here. Several bee-men have brought their apiaries here from the interior to secure the mangrove yield, and these bees came in good shape, as they had built up strong on the orange blossom and other interior crops. Messrs. Poppleton and Storer also brought their bees back from the St. Lucie River, where they had secured a good crop of wild penny-royal and saw-palmetto honey, and got their bees in good condition to make the most of the summer crop here. The Florida honey crop will run considerably below the average for this season, beyond question.

My friend, Harry Mitchell, made a little discovery lately in regard to an application to the hands that prevents the bees from stinging them, but I will let him give it to the public, if he cares to do so. W. S. Hart.

Hawks' Park, Fla., July 28, 1892.

Five-Banded Bees—What are They?

Elizabeth S., of Texas, asks: "What are five-banded bees, anyway?"

I am glad that this question was asked just at this time, as some inexperienced bee-friends have almost wanted the five-banded queen-breeders put into jail, or black-list them, which is worse. So, now, I shall try in my humble way to tell all about it.

All probably know by this time what a pure Italian queen is, or what is called a pure three-banded queen. Well, I work and breed the five-banded queens just the same as the three-banded variety. That is, the breeder I use is a pure, or as pure a five-banded queen as I can get, making all her workers, or at least seven-eighths, *five*-banded. We also rear the untested queens from them, and if one meets a black drone and produces hybrid bees, or a three-banded drone, and produces bees two, three, four and five bands, as the case may be, we call her a "five-banded queen," just because her mother is such; just the same as we call a three-banded queen a pure Italian, only mismated, don't you see?

Now, while every precaution is taken to mate the queens, some *will* "switch" and produce the hybrid bees. Now, I do not claim that all the untested five-banded queens that are sent out will produce five-banded bees, but I know a majority *will* produce some five-banded. I simply agree to rear all the queens as being five-banded from a pure five-banded mother, and the receiver must take the risk on getting five-banded bees, just as he takes the risk on getting pure three-banded bees when he buys untested queens. And a tested, five-banded queen may produce three, four, and five-banded bees, and we simply call her a tested five-banded queen, because she produces some five-banded bees, and we do not claim she will produce *all* five-banded bees, but grade or class her according to the amount of bees or part of her progeny that are five-banded. While we breed from queens and drones that are solid yellow, some of the untested queens will prove to be hybrids, just like other Italian bees.

Now I have tried to make this plain, and ask you to consider these points before censuring breeders too heavy. Let us all try to "keep sweet," no matter how hot our discussions, for would not a bee-keeper look funny with a sour face?

A Free Portrait of your favorite Presidential candidate is offered on page 389, in connection with the *Orange Judd Farmer* and the Bee Journal. We have a set of these Portraits in our office, and can say that they are very fine indeed. They are 12x16 inches in size, and, as a picture, would ornament any home. The *Orange Judd Farmer* is an elegant, 16-page, weekly farm and home paper, and should be read by all who want to make a success of farm work, and also have a well-informed household.

QUERIES AND REPLIES.

Keeping Bees on Shares.

Query 837.—What share of the honey crop is it fair to give for the care of bees, the owner furnishing all needful supplies ?—Texas.

I cannot tell.—R. L. TAYLOR.

One-fourth.—J. P. H. BROWN.

One-half.—MRS. L. HARRISON.

In your locality, one-half.—H. D. CUTTING.

I believe one-half is usually agreed upon.—MRS. J. N. HEATER.

Say one-third. But we prefer to hire help by the month.—E. FRANCE.

Just the share upon which you and the owner can agree.—G. M. DOOLITTLE.

Two-fifths for taking care of them, and one-fifth for location.—DADANT & SON.

I think about one-half. This is the rule, I think, in most sections.—A. J. COOK.

I should say, divide the cost of needfull supplies, and divide the crop even. —G. W. DEMAREE.

I am not competent to answer the question. It would depend on circumstances.—M. MAHIN.

This is a mooted question, and much depends. I will venture the assertion from one-third to one-half.—J. M. HAMBAUGH.

The returns from bees are so inconstant from year to year, that what would be fair one year might not be the next.—G. L. TINKER.

Half and half has always been the rule here. But in some countries one-fourth might pay the laborer.—MRS. JENNIE ATCHLEY.

That will depend upon the season. In a season like this, the owner should furnish everything, and pay for the care of the bees, besides.—A. B. MASON.

That is a mooted question. Much depends upon what the keeper is to do, and how he does it. I believe the division is usually half and half.—C. H. DIBBERN.

This is a question that has been asked many times, and no answer given as yet that can be followed as a rule. Wait until the season is over, and then divide equitably in accordance with results.—J. E. POND.

I don't believe much in "share" business. If I were keeping bees on share this year, I'd want all the honey and part of the old colonies for my share.—C. C. MILLER.

I never had any experience in renting bees, and am inclined to look with disfavor on the practice. I think that very few such agreements are satisfactory to all parties.—EUGENE SECOR.

Don't ask me to say, as so much depends upon conditions which you do not mention. Ordinarily, half and half; and all the increase to the apiary to offset the death rate.—JAMES HEDDON.

This would vary so much—circumstances, such as season, capability of apiarist, method of management, kind of hive, whether comb or extracted honey was produced, etc.—that no one can give a fair answer that will suit all cases.—JAMES A. GREEN.

If the cost of the "needful supplies" had been divided, one-half of the honey and increase would be a fair division. If the owner furnishes the supplies, he should have the increase, and the honey may then be equally divided.—EDITORS.

Under a Church Roof is where Mr. Geo. R. Allen, of England, took a colony of bees from, on July 15, which he tells about in the *British Bee Journal*. They had been there for 30 years. The length of comb, from one extreme to the other, was 5 feet, running upwards between two rafters. There was but little honey in it. From what the finder saw, he judged that the bees had been attacked by foul brood.

Catalogues have been received from the following :

N. A. Knapp, Rochester, O.—6 pages —Italian Bees and Queens, Leghorn Chickens, and Ferrets.

Joseph Harris Co., Moreton Farm, N. Y.—8 pages—Cotswold Sheep, Essex Pigs, Pekin Ducks, and Red Jelly Currant.

Have You Read page 389 yet ?

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Smoke for Curing Bee-Stings.

E. STRONG.

The best is, to avoid being stung. To this end, a matter of prime importance is, to singe off the hair from the hands and wrists. Do this in the spring, and keep it singed off all summer. Take an ordinary lamp and turn up the blaze. The object is to burn the hair, and nothing else. I used to light a piece of paper, but this is too harsh, and for the time, nearly as bad as the sting.

A mild-eyed bee becomes insane at once when its wings strike animal hair. This causes the desperate tenacity with which they cling to the hair of an animal or brush. And they sting at once, without warning, the hand that is covered with hair, when, by accident, their wings touch it, and how much more when they throw themselves against it on purpose to get up a fuss? But the hand that is singed and smooth, and very slightly rubbed over with honey and propolis, escapes with impunity, as a rule. A lady's hand is certainly well adapted to handling bees.

Like most bee-men I work bare-handed and bare-faced, and escape with very little stinging, but I carefully observe certain little matters that experience has pointed out, and sharply compelled recognition. Everybody knows how to make slow motions, and move in a decrepit manner, but, in passing from one hive to another, forgets to puff a little smoke over the hands. If the hands are moist with perspiration, the smoke will cling all the better. When a bee stings, wet the spot with saliva, and smoke it with hot smoke. The pain will immediately be lessened.

I know of no remedy so good as hot smoke, and so easily applied without loss of time. Time is an important factor, and the smoke penetrates the wound at the same time as the poison and saliva. Smoke is the safest antidote to pain. It can even prevent and quiet lockjaw.

A dangerous wound with the blood heated up in hot weather, can be safely treated with smoke. Hold a piece of smoking punk-wood so that the warm smoke will envelop the wound for five or ten minutes about twice a day. Observe the patient, and be convinced.

A man in harvest time, and in the heat of the day and of his work, slid off a stack and landed on a fork. It went through the center of the hand and between the bones. At this season of the year, and with the poisonous wheat rust on the tines, this was bad. He was gone to the house about an hour, smoked his hand thoroughly, and went to work again, and after that felt no more pain, and lost no more time. Is this strange? Not at all. This has been repeated, to my knowledge, time and again.

A pine sliver, one inch long and one-eighth of an inch thick, was driven into the center of the thumb from the end, and broken off, and the flesh closed over it, between the bone and thumb-nail. It was so imbedded, that no sliver was supposed to be there. It was smoked three times a day. No time was lost from work nor sleep, and when the sliver was removed after ten days, it came out opposite the way of entry.

Another and chief reason for using smoke on bee-stings is to destroy the scent of the poison, so that other bees will not smell it as you go right along with your work.

My better half says they sting me just as much as any one, but I do not tell of it. This is error. I sometimes work all day without a sting. Last fall, in overhauling the bees for winter, was such a day. When near night, two ladies drove up, and I went to the carriage with comb and bees in my hands, and yet in finishing that colony, with my mind somewhere else, I received several stings.

When you see a man approach a hive and quietly take off the cover carefully, and before the bees seem aware of callers, puff a *little* smoke over them, as he pulls off a thin cloth, and removes one rack without a bee leaving the top, except to her work, you can just mark it down in your mind, that that man can work all day with comfort to himself, and accomplish just as much as one who walks up to a hive with so heavy a boot that one or more bees will take the trouble to come out of the entrance and around the hive to see who is there. And when he rips off the cover with a jerk, so as to get in the first blow of the attack, he has the enemy at once in front and rear, and the battle begins, and only ends when the hive is closed, and work hastily done instead of slowly. But he says he is *used* to stings. I believe it. How could it be otherwise?

But there are times when the bee-keeper realizes that there are no infallible rules in bee-keeping. When the bees seem cross, he uses too much smoke, is slightly "rattled" himself, and when he will fail to construe his sentences by the rigid rules of grammar. Even Mr. Doolittle once said that his wrists were sometimes nearly paralyzed with stings. Perhaps this has no relation to unsinged wrists; however, most hands have enough hair to make a great difference, whether they are singed off smooth or not.

A little honey rubbed over the backs of the hands is a great protection, but if one or two bees persist in following you and "looking you out of countenance" for a long time, pick up a 3-inch shingle, step back a ways and play ball with that bee. If you knock it crazy, and it "comes to" after lying in the grass ten minutes it may think that it is its turn to play ball, and send in a stinger without notice. But all this happens in a lifetime, and much more. This "ball playing" is perhaps wrong, and ought not to be advised. Perhaps it does not mend matters, but there is a certain satisfaction and sense of relief for the time.

The ease with which a cover is removed makes all the difference in the world with the quiet manners of a colony, and for this purpose I know of nothing as good as a cloth covering the top of frames and hive.

As to varieties of bees, the beautiful temper of a throughbred Italian bee is about as near right as we shall find in this world. We want a bee to sting on suitable accasions. The boys let them alone, and do not need to be told what the rights of honey-bees are. They may stone the helpless toad, and pull the cat's tail, but if they step on a honey-bee it is an accident every time. The tears are genuine.

Kalamazoo, Mich.

The Origin of Foul Brood.

C. J. ROBINSON.

In the issue of June 9, 1892, page 766, I essayed, in response to Dr. Miller, to explain how it transpires that foul brood originates seemingly spontaneous. The Doctor has not, like Mr. Corneil and certain other correspondents, joined issue with me over the mooted question: "Does, or does not, foul brood, under any circumstances, originate within a colony of bees?"

Up to 1880 there was no record of any instance of so-called foul brood originating, and it was supposed that all cases of foul brood occurred by reason of inoculation—a transfer of foul brood virus from a diseased colony to healthy brood. I was the first who promulgated that foul brood does, whenever certain conditions are present, originate through a peculiar fermentation of the organic matter called "chrysalis," which in a state of progressive development, is also called "aurelia," a virus that attacks live brood and spreads as does dead tissue (mortification) in contact with healthy tissue or chrysalis.

Several years ago a correspondent mentioned that he had cases of foul brood in his apiary. He was situated many miles from any colonies of bees, so distant that his bees could not be visited by anybody else's bees, and the query with him was, Whence came foul brood among his bees? He put the question, and the reply he received was this: "There must have been colonies of bees in the woods that were diseased, and they visited the hives, thus transmitting the disease." Such an answer is more visionary than sensible.

How came foul broody colonies in the woods, isolated from hives of bees? The hackneyed scepticism, which people so willingly oppose to all progress of the human mind, is a comfortable pillow for lazy heads, but the period in which we live allows no time to sleep, when every hour must sweat her sixty minutes to the death. Graves said: "The empire of Reason, extending from the old to the new world—from Europe to the Antipodes—has encircled the earth, and the sun never sets on her (Reason's) dominions; individuals must rest, but the collective intelligence of the species (mankind) never sleeps."

The most eminent teachers are oftimes conceited. The greatest French surgeon (Duputren) writing of the simple Kentuckian's operation—ovariotomy—denounced the operation as the act of a man who should be indicted for manslaughter, although it must long since have added to the community hundreds of thousands of useful lives of women and mothers of families.

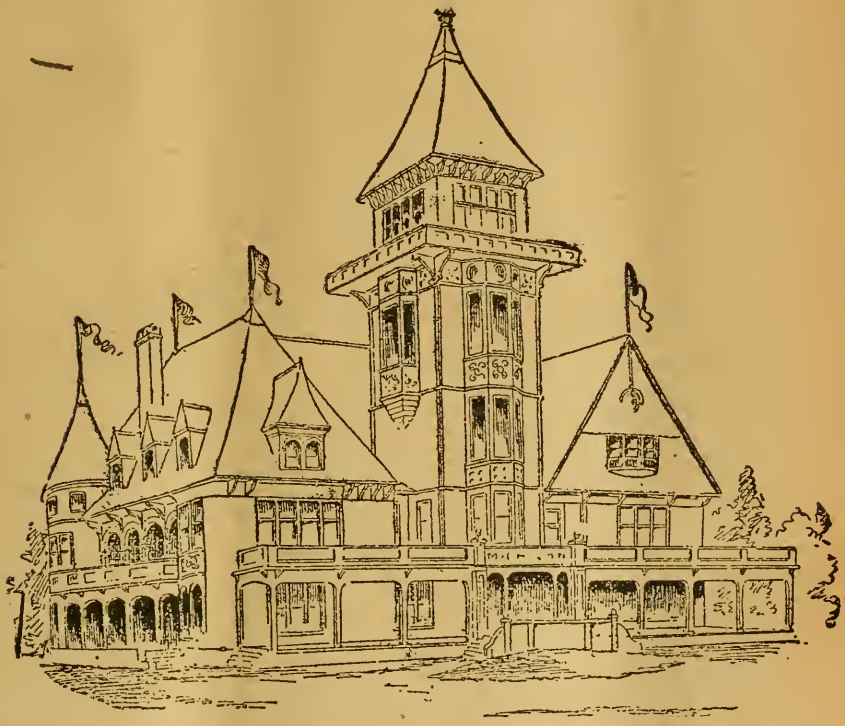
The so-called foul brood ought not to be said that it was a creation of species, unless it be conceded that ferment in all its phases was created as such in the beginning. As well might so-called blood-poison be said to be a creature, as

to say that foul brood only occurs by inoculation. Scientists well know that "blood-poison" is the result of a special ferment, whereby a virus is developed in some part of the animal economy. In a similar way foul brood virus is generated incidentally.

We have seen Darwin elaborating the great scientific doctrine of evolution—in life, in disease, in society, in politics, in religion; Pasteur, demolishing all that is hypothetical in the process of fermentation, classifying his "anaerobies" and "aerobies," demonstrating that fermentation was "life without air," and elucidating the phenomena of lactic, butric, and acetic fermentation, and, again, dismissing to the limbo of exploded hypthesis the doctrine of spontaneous generation, and foretelling the results of bacterial processes in the disorders known as the "cattle plague," the "vine plague," and the "fowl cholera."

It has been promulgated that foul brood cannot be brought into existence except by inoculation, any more than corn can be made to grow without planting the *seed*—philosophically, a wonderfully awkward comparison. Corn is the fruit of a seed—the germ being reproduced; foul brood is a virus which is generated by the evolution of organic matter, changing the organism of the soil in which it grows—the soil changed to "seed"—and all ends in further changes.

Richford, N. Y.



Michigan State Building at the World's Columbian Exposition, in 1893.

Chemical Analysis & Honey Adulteration

PROF. A. J. COOK.

It is well known that sucrose or cane sugar is chemically distinct from glucose; that unlike glucose it will not reduce the copper salts, and has a strong right-handed rotation. The nectar of flowers is largely cane sugar.

Commercial glucose reduces the copper salts, and because of the presence of dextrose, gives a right-handed rotation.

Invert sugar—cane sugar that has been reduced by heating with an acid—is left-handed in its rotation. It is usually given as -25°.

Bees gather the cane sugar of nectar, and while gathering and passing to the hive, they reduce it by digestion, or change it to invert sugar. Thus honey contains from 2 to 8 per cent. of sucrose, 60 to 75 per cent. of reducing sugar levulose and dextrose, and gives a left-handed rotation rarely higher than a -20°.

As bees digest the nectar of flowers, we would suppose that honey gathered very rapidly would be less perfectly digested, as it would be a shorter time in the digestive canal, and so would contain more sucrose, and less reducing sugar. As bees gather sweets from such varied sources—widely different flowers, sap and secretions from various insects—we would suppose that the honey might vary not a little. Thus I have long wondered if the formulæ depended upon by our chemists were entirely reliable, and sufficient to always determine the genuine from the adulterated.

To determine this point, I recently sent over 50 samples of honey to three of our ablest chemists, viz.: Dr. R. C. Kedzie, Prof. H. W. Wiley, Government chemist, and Prof. M. A. Scovell, of Kentucky. I have preliminary reports which are exceedingly interesting.

The samples which I sent were simply numbered. There were honeys from all our noted honey-plants, several samples of honey-dew, honey stored rapidly from pure cane syrup fed very rapidly to the bees, and mixtures of honey and glucose.

The samples of honey adulterated with glucose, were detected, but with them was classed a sample of aphis honey, which our bees gathered from bark-lice, and which was rank and entirely unmarketable. Two other samples of honey-dew were pronounced genuine honey. One of these was from cynip infested oak acorns. Both were pleasant to the taste.

The samples of honey from cane sugar syrup, one extracted the next day after it was stored, and the other not until it was capped, were both detected. But with them were classed genuine honey from basswood, white clover, both were very fine, and one from horse-mint, all very rapidly gathered. Thus my opinion, often expressed to my students, that our chemists could not distinguish genuine honey which was rapidly gathered from that secured by feeding cane syrup, is fully sustained.

Three samples, one white clover, one golden-rod, and one white sage, all very rapidly gathered by the bees, gave such a high left-handed rotation that there was a suspicion of adulteration, with invert sugar. Yet these were all genuine honey of superior excellence.

Three other samples, one from black mangrove, one from an unknown source, stored in Louisiana, and which never granulated, and one from horse-mint (the latter gathered very rapidly), deported themselves exactly as would invert sugar.

Thus we see, that while the chemists can detect adulteration, even with one-third or one-fourth glucose, they could not distinguish honey from flowers, from that secured by feeding bees pure cane-sugar syrup; that while they now can detect adulteration by use of commercial glucose (that most if not always used), they cannot by use of present methods, detect honey produced by feeding bees wholly or in part on cane-sugar syrup.—*College Speculum.*

Agricultural College, Mich.

Black German Bees vs. Italians.

JOHN H. BLANKEN.

It is about 23 years since the yellow bees came to this country, and it can be easily proved by bee-keepers who kept bees long before that time, whether the Italian or the black German bees are the best. We all know that years ago we had more honey, that of late years the honey crop has been growing smaller, and had we all black bees we might have more honey, because the black bees keep themselves pure, and bring in lots of honey, where Italians are getting mixed up, thus giving their owners plenty of trouble and work; and by trying to keep pure Italians and experimenting to improve our bees we are getting less honey.

Mrs. Atchley says that she kept both blacks and Italians for 20 years, and long ago decided on that question. It must be remembered that within 20 years we have had good improvements in bee-culture, and we should have more honey instead of less in late years. And then, Mrs. A. says that in really good honey-years we cannot see much difference between the two races.

Mr. H. C. Farnum, on page 450, says that the blacks are ahead in honey-

gathering in his location. especially when honey is scarce, and thinks that the black bees should be defended.

Mr. Lawrence, on page 478, says: "The little black or brown bee for me—less work, more honey, more money.

Mr. Irvin Grover, on page 387, says: "I have tested the blacks by the side of the Italians, and have found the Italians superior in every point mentioned by Mr. Blanken."

Some people are so down on black bees that if they see a little black bee anywhere, they will attempt to kill it. Now, if a poultry-breeder would kill all his black fowls, he would certainly do wrong; and so it is with bee-keepers—they are doing wrong in throwing away a good black queen, for they are losing both honey and money.

What I have said before, I must say again, no matter what others think about it; and those that know me will remember that I never use a smoker, neither do I use gloves, and very seldom a veil, in my own or anybody else's apiary; for I have been working with bees and in apiaries since my 8th year, and find that black bees are not as cross as hybrids and others, and are better workers.

Jersey City, N. J.

Why Clergymen Should Keep Bees.

REV. J. CARSWELL.

This is a subject which has not been touched in this paper for some time, and so a few lines upon it may not be out of place. It may reach some of my brethren in the ministry who have not thought of the matter before, and induce them to join our ranks and begin the study of the honey-bee, which they will find one of the most interesting that can engage their attention.

A large number of the most advanced and intelligent bee-keepers belong to this class, and they have done much to make this industry what it now is. In proof of this, I need only to refer to the case of the Rev. L. L. Langstroth, who, by his inventions, writings and addresses, has well earned the title of "The Father of American Bee-Keeping." We do look up to him, and reverence and respect him as a father, and sympathize with him deeply in the keen sufferings, the "much tribulation" through which he is called upon to pass.

Others of the clerical profession, though not so noted at Mr. Langstroth, have added their quota to the general fund of information and experience. Still the number of clergymen who keep bees is comparatively small. Now, there are quite a number of reasons why they should keep bees, viz.:

1. For recreation and exercise. No class of men need this more. In fact they must have it if they are to make the most of themselves, and do their work in the best possible way. Now, the occupation of bee-keeping furnishes them, during a portion of the year, with the recreation and exercise they require. They cannot help becoming intensely interested in it, as their knowledge increases, and they go on making experiments and performing the manipulations necessary for successful bee-keeping. In this way their minds are drawn away from their studies and their worries, and are rested and refreshed. Whilst thus occupied in the open air, they obtain exercise for their bodies, and inhale an abundant supply of oxygen, which causes the blood to course through their veins with greater ease, and imparts fresh warmth and vitality to the entire system; so that when they return to their studies, they are prepared mentally and physically for doing efficient work.

2. For the addition to their incomes of what it furnishes. As a class, clergymen are underpaid, considering the time and money spent in preparation for the work, the position they must occupy in society, and the innumerable calls made upon them for Christian and benevolent objects. The result is, that very many have great difficulty in making ends meet. If they have families to educate it is only by exercising self-denial and observing the strictest economy that they can do it. In these circumstances the profits of a little apiary form a most helpful appendage, and secure many little extras which add very materially to the comforts of the home. I have heard of more than one clergyman who made enough from his bees to educate his children, some of his sons being now in the ministry.

3. For the means which it furnishes of ministering to the sick. Whilst imparting to them spiritual consolation, he can at the same time tempt their impaired bodily appetites by giving them a little honey done up in an attractive way, and by a slight attention of this kind, he may strengthen the tie and increase the affection subsisting between his people and him.

4. For the counsel he may be able to give, and the assistance he may render

to those of his parishioners and neighbors who may keep bees.

Among the students found in Mr. D. A. Jones' apiary a few years ago, was a Roman Catholic priest from Muskoka, who came there to learn the art of bee-keeping, that he might instruct his people, and put them in the way of adding materially to their scanty livelihoods. He realized that though most of that region was unfitted for profitable cultivation, there was an abundant supply of flora that was going to waste, and that if he could induce the poor people who had settled there to go into bee-keeping, it might very much improve their worldly circumstances. Some of the largest yields of honey we have heard of have been in Muskoka.

Now, few clergymen may be situated as this priest was, and be able to turn the knowledge acquired to such account for the benefit of those under their charge; yet all have many opportunities of being helpful to others in this respect, and it affords one a great deal of pleasure to do this. He may occasionally lose a little time, and be subjected to a little interruption; but the happiness derived from being the means of rendering assistance to others compensates him for it all. One never loses anything by being always ready to help others. In fact, this is one of the great aims of life—"not to look on our own things, but the things also of others."—*Canadian Bee Journal.*

Bond Head, Ont.

Pure Honey and C. F. Muth & Son.

REV. L. L. LANGSTROTH.

Allow me to give my reasons for believing that pure honey and C. F. Muth & Son have such a natural affinity for each other that they will never be found warring against each other.

When my patent on movable frames was extended, in 1866, I endeavored to sell brass trade-marks, each having its own number, for 25 cents apiece—one to be put on every new hive made under the extended patent. Mr. Muth, who was then just beginning his apiarian career, purchased trade-marks for all the hives he made for his own use or for sale, until my patent expired. He had no personal acquaintance with me; but he believed that I had rights, and was determined to respect them. If the great mass of bee-keepers who were benefited by my hive had done the same thing, I should have been well rewarded for my invention.

I had, therefore, ample proof, more than 20 years ago, from Mr. Muth's dealings with me when I was too poor to defend my legal rights, that he was an honest man; and his whole course as one of the largest (if not the largest) dealers in the United States in pure honeys, has established for him a reputation for fair dealing, of which any business man might justly feel an honorable pride

For the 25 years I have known Mr. Muth, I have been a frequent visitor at his house, often spending days with him, and have been familiar with all his methods of putting up his honey, which, indeed, have always been open to the honey-world, as his place of business has been a great rendezvous where all bee-keepers might be sure of a hospitable reception.

Now, if there had been any attempt to adulterate the goods in which he dealt, how could it possibly have escaped the notice of the hosts of bee-keepers who were welcome at times to inspect all his processes; or how could it have failed, sooner or later, to have been exposed by some of his employes?

The only adulterants of honey which could ever be profitably used are sugar and glucose; and as Mr. Muth deals in honey by the hundreds of thousands of pounds, he could not possibly adulterate his honeys with either on so large a scale as to make it profitable, without the kind of business he was carrying on betraying itself by the sugar and glucose barrels which he would have been obliged to handle. The idea that Mr. Muth could adulterate, and yet escape detection, is too preposterous to be entitled to the notice I have already given it.

It is true Mr. Muth deals largely in all kinds of pure honey—good, bad, and indifferent; for there is a large demand for all these kinds, even for the darkest and poorest, which is used in the manufacture of printers' rollers—nothing else being able to compete with it for such a purpose. Tobacconists and brewers are also large consumers of pure dark honeys, while the choicest qualities are purchased for making the famous honey-cakes which keep fresh for nearly six months. A single maker of these cakes buys of the Muths a carload of choice honey—some 20,000 to 24,000 pounds—ever five or six weeks!

Enough has been said to show, not only that Mr. Muth is not the style of

man out of which adulterators are made, but, apart from all motives of honor and honesty, he is a man of too much good business-sense to engage in falsifications which, sooner or later, would surely be detected, and would end in the ruin of his extensive business.

But may not Mr. Muth be imposed upon by those who have adulterated honeys for sale, and thus become an innocent agent for imposing their goods upon the public? Now, as the only way in which honey can be profitably adulterated is by using sugar or glucose, such fraudulent mixtures can never be imposed upon such experts as Charles F. Muth & Son. Before I lost my exquisite sense of taste and smell, I could always recognize any honey with which I had once become acquainted.

For the last four years Mr. Muth has associated with himself in business his son, Augustus G., who has been with him as an assistant ever since he has dealt in honey, and who shares the same honorable instincts with his father.

Those who are personally acquainted with C. F. Muth need no endorsement of his honesty by me or any one else; but as his good name has been called in question by those who do not know him, I have felt that it was my duty which I owed to my tried friend of so many years, and to the bee-keeping public, to speak as I have.

If any honey bearing the label of C. F. Muth & Son has been found to be adulterated, I believe that either some mistake has been made in the analysis, or else it has been tampered with by dishonest parties. Dr. C. C. Miller is confident that Mr. Muth's labels have been counterfeited by dealers who wished to dispose of their bogus honey on the strength of his good name.

I close as I began—pure honey and Charles F. Muth & Son are words and things which have always gone together, and which I hope will very soon, with some suitable device which cannot be easily counterfeited, become the legal trade-mark of a firm which has done so much for the bee-keepers of this country by affording a cash market for their products, and by setting their faces as a flint against all adulterators and adulterations.

Dayton, O., Aug. 25, 1892.

[We think that no one who knows Messrs. Muth & Son need be told that they are honest men, and would not stoop to the crime of adulteration of honey, or anything else; and the only excuse we offer for publishing the foregoing article, is because of the reflection that has recently been cast upon their fair name by reason of the "Report on Honey" issued by the Government under the direction of Prof. H. W. Wiley. —EDS.]

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Oct. 4.—Capital, at Springfield, Ills.
C. E. Yocom, Sec., Sherman, Ills.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

Oct. 18, 19.—Illinois State, at Chicago, Ills.
Jas. A. Stone, Sec., Bradfordton, Ills.

Nov. 28.—Allegany Co., at Angelica, N. Y.
H. L. Dewight, Sec., Friendship, N. Y.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bee-Keeping in State of Washington.

I notice by reference to the different bee-papers that the great majority of bee-keepers are short of surplus honey. Surplus in this part of the country is not very plentiful, mostly on account of the late, backward spring.

I notice on page 303, that some of our brethren have somewhat the same kind of people to deal with that we have, viz.: to get the best honey for the

smallest possible price. I have sold all of my honey in sections for 25 cents per pound, and would not sell for any less, while some others were selling theirs for 20 cents. I told them I would keep mine until theirs was all sold, and then they'd feel like kicking themselves for selling cheap. I always scrape my sections clean, while they do not take the trouble. I also stamp my name on all I send out, so that any one can tell whence it came. If merchants have their price for goods they sell, why cannot we? Supply and demand govern the prices.

This part of the State (Whatcom county) is just beginning to go into the business on the improved processes, the Langstroth, or Simplicity, taking the lead. Some are going to try the Italian bees, while some are almost tired of them, on account of their swarming propensities. Most of our bees go into winter quarters in good condition. All of the bees here are wintered on the summer stands. How is that for 49° north latitude? J. B. RAMAGE.

Blaine, Wash., Sept. 6, 1892.

Just Rolling in the Honey.

I have now 38 colonies of bees that are just rolling in the honey from smartweed, golden-rod and wild-aster. The wild-aster is yielding a great deal of nectar, and bees work on it all day long.

W. A. FEE.

Rockport, Ind., Sept. 13, 1892.

Honey from Spanish-Needle, Etc.

Through the columns of the BEE JOURNAL I gave some account of my spring trials. Well, we had an abundance of white clover, but it did not yield much nectar, and with 45 colonies I secured only 450 pounds of surplus, only 30 of which was comb honey. Of 2 colonies standing side by side, and the same strength and stores, one run for comb and the other for extracted honey (I have extracting combs ready built), the "comb honey colony" would not store an ounce of surplus, while the "extracting colony" filled their super. Mr. Day, who lives near me, has 35 colonies, and run them for comb honey, but did not get a pound. Why is this?

I am looking for a grand yield of Spanish-needle honey. The fields are yellow with it in places, and I am moving my bees out of town into the Spanish-needle fields. I can squeeze a good-sized drop of nectar from each blossom. My bees worked some on smart-weed, and I should like to know what kind of honey it yields. I sell my comb honey here at 20 cents per pound; white clover, extracted, at 12½ cents; and Spanish-needle at 10 cents. I should like to hear the opinions of bee-keepers on the wooden package for extracted honey that is advertised.

My scale hive showed as follows for the last four days: 4 pounds, 4½, 5, and 4¾ pounds; total, 18¼ pounds in four days, and it is only a moderately strong colony.

It makes me smile to hear bee-keepers assert that bees cannot hear, and then gravely tell us of the swarming note, calls, etc., which the queen gives when on the wing. FRANK RICHARDSON.

Moberly, Mo., Sept. 9, 1892.

[Smart-weed honey is fairly good honey, but it has a rather sharp or "smart" taste. Some people prefer it, doubtless, on that very account.—EDS.]

Good Prospects for Fall Honey.

We are having nice queen-rearing weather—we never had better weather, or better prospects for fall honey than now. MRS. JENNIE ATCHLEY.

Floyd, Tex., Sept. 14, 1892.

Bees in Good Condition for Winter.

I have 55 colonies of bees, and have obtained no honey and no swarms; but the bees are in good condition for winter. ANDERSON HYER.

Washington C.H., O., Sept. 13, 1892.

Working on "Heart's-Ease."

Heart's-ease is the rage with the bees now, and I want to keep them at it. One colony stored 126 pounds of comb honey. I have 73 colonies.

B. F. FEAZEL.

Washburn, Ills., Sept. 14, 1892.

Predictions of the Honey-Flow, Etc.

I notice that Mr. Thomas Johnson, of Coon Rapids, Iowa, asks why I did not tell that they would have one of the best honey-flows in Western Iowa, instead of telling what I did. What did I tell? I said that Iowa would have a far better yield this year than last. Did that miss it badly?

I said that the eastern part of the State would have a good yield, and that it would not be good in the West; but I did not say there would be a failure in any part of the State. I said it would be the worst failure in Mills, Cass, Guthrie, Dallas and Polk counties of any part of the State, but I did not say it would be a failure there. Mr. Johnson says it has been one of the best of honey-flows.

I think that Mr. Frank Coverdale, of Welton, some three or four years ago, averaged close to 140 pounds to the colony, and I think doubled his colonies, and he had about 80, spring count, as near as I remember. According to that, Mr. Johnson did not get one-third of a crop. I do not see how he can call that a good yield.

I stated in my predictions that I did not have as good a chance this year, as I had last, to show that I could tell what I claimed I could; but when the right time comes, which surely will come, I will convince you that I can tell what I profess to tell, beyond a doubt. If the weather had been favorable, there would have been double the honey this year that there was last year. It was in the flowers, but the bees could not get out to gather it.

I do not know that I would have given out my predictions for this year, but bee-men kept writing me from every part of the country, for my predictions. I know I did not have a good chance to prove that I could tell what the honey-flow would be.

I am glad that bee-keepers are interested in my predictions, and I will prove to them that I can tell of any coming failure of honey, caused by the non-secretion of nectar when it prevails over any great portion of country the same year.

I have not taken a single pound of honey yet. I think, though, that I will get some yet, as I think we will have a good fall flow from asters, if it does not get too hot and dry. It is very dry now, and has been so for a long time. Corn is cut short by half in this part of the country. SAM WILSON.

Cosby, Tenn., Aug. 27, 1892.

[We think it is about time that Mr. Wilson should begin to give his proof (if he has any) that he can foretell whether there will be a honey-flow or not, and not keep on saying that he *can* "show that he could tell what he claimed he could." If he has anything of value along the line of prophecy, it is quite time he was giving some "reasons for the faith that is in him," or he will soon be put down as a "false prophet."—EDS.]

COMBED AND EXTRACTED.

Beautiful May—That Didn't Come.

MRS. A. L. HALLENBECK.

All through the long dreary April
We longed for the lovely May,
With her sunshine and birds and flowers
That come with the soft spring day.
But we watched her birth in the morning,
Through teardrops of falling rain;
For Nature was grieved for her darling,
And wept that she came thus in pain.

We hoped she would smile on the morrow,
And watched through each dreary day
For the flowers, the birds, and the sunshine,
To welcome the lovely May.
But the winds grieved with mournful sighing
And the clouds wept their tears of pain,
Till all of her sad days were ended,
And she died in the sobbing rain.

JUNE.

But June came, and with it the sunshine;
It came as if meaning to stay;
The clover-blooms nod to the breezes;
The busy bees, working away,
Bring joy to the hearts of their keepers,
And teach us to never despair;
For He who gives all of our blessings
Knows how to, and when to, and where.

Millard, Neb. —Gleanings.

Japanese Buckwheat.

This foreigner has been tried by many and is well liked, the seed being larger than other well known varieties. Where the corn was drowned out by floods, it might have been sown. Years ago I frequently drove by a farm where near the road was a low, rich piece of ground yearly yielding an immense growth of iron-weed and useless plants. It changed hands one spring. It was before the advent of tiling, but when the low, rich piece of ground had dried out, it was ploughed up, pulverized and sowed to

buckwheat, which put a quietus on the weeds. The value of this ground was ascertained, and yearly since it has yielded good crops of different kinds.—MRS. L. HARRISON, in *Prairie Farmer.*

Distance to Prevent "Mixed Bees."

I see some write as though they thought two different races of bees could be kept within one mile of each other and yet be no mixing from one to the other. If such writers are practicing what they teach, they do not know what "mixed bees" are.

When the apiary of which I am part owner was first Italianized, the Italian bees were unknown about here. At that time there were within five miles of our apiary about as many hives of black or German bees as we had Italians; and by the second season about half of the hives of black bees within that distance showed trace of Italian blood. A few colonies mixed seven miles off. The bees in some of these hives would be pretty fair hybrids, while in others about a fourth of the bees would show one and two bands, the others none at all. Up to this time no swarms had left our yard; and, according to the theory of nearly all the best authorities on bees (in which they surely are wrong), there could not have been any hybrid drones in the hives of black bees by the second season.—GEORGE W. CLEVELAND, in *Gleanings.*

An Awful, but True, Indictment.

The liquor traffic bids for ignorant vicious and purchasable votes. It dominates in primaries and dictates nominations in conventions. It silences the police. It suborns evidence. It bribes juries and judges. It lobbies the legislatures. It combines with all kindred evils. It seeks the balance of power. Its own forces are as compact as a Roman legion or a Macedonian phalanx. It is a secret tribunal. It is an owl of the night. It acknowledges no criterion but success, and worships no God but self-interest. It has no patriotism, and carries the black flag. Instance the shameful record of the Louisiana lottery. What that lottery was for a time, the liquor traffic is all the time.

Who can outline this traffic? To-day we see it in prospective as it throws across the dark and distant heavens, against a back-ground tragic and terrible, its direful and ever changing profile. A Titan, a fighter, an athlete, a vampire, an octopus, a python, a volcano. It has the stealth of the tiger, the bound of the panther, the weight of the mastodon, the momentum of an avalanche, and speed of lightning. Terrible is its secretiveness, it never foretells what it wants, nor where it goes, nor where it strikes. It advances and recoils. It threatens North and South.

With one fringe of its cloud it eclipses the genius of Prentiss, while with a paralyzing glare of its lightning it "turns the poesy of Burns into tuneless babble." It was said of a French communist, wherever it respires it conspires with no more conscience than cold iron, no more heart than an iceberg; it confronts us to-day, as ever before, always the foe of man—always inexorable—inaccessible—glacial. The man who makes friends with it lashes himself to a tomb with the boom of eternity's retribution sounding in his ears. The party which makes coalition with it invites the scorn of man and the judgment of God.

If you ask the centuries what is the result of this traffic, the answer comes century by century, like the peal of minute guns from some drowning ship, or like the measured stroke of a funeral bell, or like storm-thud on granite shores: "Death—ever death—utter death." An eternal reverberation which fills all history.—DR. B. H. CARROLL.

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Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 383, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Read our great offer on page 389.

AMERICAN

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When Talking About Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we offer some excellent premiums that you ought to take advantage of.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	*Club.*
The American Bee Journal	$1 00	
and Gleanings in Bee-Culture	2 00	1 75
Bee-Keepers' Review	2 00	1 75
The Apiculturist	1 75	1 65
Bee-Keepers' Guide	1 50	1 40
American Bee-Keeper	1 50	1 40
Canadian Bee Journal	2 00	1 75
Nebraska Bee-Keeper	1 50	1 35
The 8 above-named papers	6 25	5 25
and Langstroth Revised (Dadant)	2 40	2 25
Cook's Manual	2 00	1 75
Doolittle on Queen-Rearing	2 00	1 65
Bees and Honey (Newman)	2 00	1 75
Advanced Bee-Culture	1 50	1 40
Dzierzon's Bee-Book (cloth)	2 25	2 00
Root's A B C of Bee-Culture	2 25	2 10
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Farm, Field and Stockman	2 00	1 75
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Rural New Yorker	3 00	2 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Almost Every Bee-Book that is now published we mention on the second page of this issue of the BEE JOURNAL. Look over the list and select what you want. For every new yearly subscriber that you secure for us at $1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apiarian knowledge among your friends.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

One-Cent Postage Stamps are preferred by us when it is necessary for any of our subscribers to send stamps in place of paper money, Express or Post-office Money Orders, or drafts on New York or Chicago. The Express Money Orders, or Post-office Money Orders, are the safest outside of drafts. Do not send checks on your local banks as it costs us 25 cents each to get them cashed here. Postal Notes are no safer than cash put into the envelope, so do not waste your money in buying them, but get a Money Order instead.

This Means You.—When ordering any of the books or articles which we offer clubbed with the BEE JOURNAL, or otherwise; or when sending anything intended for us, such as subscriptions to the BEE JOURNAL, or matter for publication, *be sure* to address everything to —George W. York & Co., 199 Randolph St., Chicago, Ills.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

Be Sure to read offer on page 389.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
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THOMAS G. NEWMAN, GEORGE W. YORK, } EDITORS.

Vol. XXX. Sept. 29, 1892. No. 14.

EDITORIAL BUZZINGS.

Now Doth the busy little moth
Improve each shining minute,
By hunting up your nicest comb
And laying millions in it.
—E. L. PRATT, in Gleanings.

The Postponing of the World's Fair until 1894 has not been suggested, so far as we have heard. Bro. Jones, in the *Canadian* for Sept. 15th, says:

We wonder if there is any truth in the report that the World's Fair is to be postponed another year owing to the cholera epidemic.

Should it be postponed, we will at once notify our readers on this page of the BEE JOURNAL. Being right here "on the ground," as it were, we would likely hear of it as soon as any one.

Be Sure to read offer on page 445.

More Honey for Analysis is wanted by Prof. Cook, and he desires it *at once*. We have received the following from him, and he wishes us to aid him by urging bee-keepers to forward samples of the honey. Read what the Professor says:

DEAR MR. YORK:—In our investigations of honey we need samples of honey fram honey-dew—dark, light, good, bad, all kinds; from oak and from bark and plant lice. I don't care if it was gathered several years ago, only if it is known surely to be such honey. I would like 3 or 4 pounds sent by express at my expense. I wish all would help me in this good cause. If needs be, I will pay for the honey. Yours truly,
A. J. COOK.

Now, if the reader has any honey that corresponds to the above description, please send 3 or 4 pounds to Prof. Cook, at Agricultural College, Mich. Every bee-keeper will be glad to help in this matter, we are sure. The Professor very much desires "to go the bottom" of this thing, so that hereafter chemists will be able to tell the difference between pure honey and the adulterated. Every producer of honey should be interested in this, and help all they possibly can.

Did you read Prof. Cook's article on "Chemical Analysis and Honey Adulteration," on page 401, of last week's BEE JOURNAL."

Every Boy and Girl will be interested in reading page 445 of this issue of the BEE JOURNAL. And we shouldn't wonder if the older folks, also, would be much pleased. We offer the BEE JOURNAL from now to Jan. 1, 1894, for $1.00, to a new subscriber, and give the World's Fair Combined Games and Puzzles" as premium for getting such new subscriber. Or, we club it with the BEE JOURNAL for one year, for $1.20.

The Illinois State Convention meets at the Commercial Hotel in Chicago, on Oct. 18th and 19th. Will *you* be there?

Bro. Hutchinson, of the *Review*, is now the proud father of an interesting "quartette" of the "sweetest" and "nicest" girls in all Michigan. We wish to congratulate our brother editor upon the recent arrival of the fourth little "queen," of whose advent he thus writes with such dainty eloquence in his September *Bee-Keepers' Review :*

Another "tiny feather from the wings of love" has been "dropped into the sacred lap of motherhood" at the home of the *Review*. It is one of the sweetest, nicest little girls that we ever had. Ivy said:—

"Papa, are you going to put her in the *Review ?*"

"Yes, you write a notice, and I'll put it in."

"Oh, I couldn't do that."

"Well, let's see how you would start out if your *were* going to write one?"

"I would say, 'The editor of the *Review* has another bright, lively little daughter, although she has not made very much noise yet.'"

That was as far as I could induce her to go, but it expresses the situation as well, perhaps, as would a whole page, with the exception that the baby has since redeemed herself in the way of noise-making.

The Minnesota State Fair was held at Hamline, Minn., on Sept. 5th to 10th, and the St. Paul *Pioneer Press* of Sept. 9th contained the following notice of the meeting of the State Bee-Keepers' Association, and also the honey exhibit at the Fair :

The Bee-Keepers' Association met yesterday morning in the Institute Hall to discuss plans for the World's Fair exhibit. The State Commission has set aside $500 for this industry, but the members of the association are hopeful of securing a much larger amount. Mr. A. K. Cooper, of Winona, Secretary of the association, has charge of the collection of the exhibit, and he proposes to secure a little honey from every county in the State where any attention is paid to the keeping of bees. In some instances he may be compelled to buy the honey, but he expects to have this donated in most cases. Both extracted and comb honey will be collected. Minnesota is by some considered too far north for the honey-bee, but the State will make an effort to secure the first premiums at the World's Fair.

The past season has been a poor one for bee-keepers, but the exhibit in the main hall is a creditable one. J. P. West, of the State examiner's office, and President of the Bee-Keepers' Association, is superintendent of this display, and to his personal efforts is largely due the present success. J. M. Doudna, from the northern county of Douglass, has an attractive exhibit in beeswax, and some very fine honey; he has taken four first premiums and second prize in sweepstakes. Other counties well represented are Hennepin, Houston, Kandiyohi and Wabasha.

The Bee-Keepers' Association will hold its annual meeting in Minneapolis on Thursday, Friday and Saturday, immediately following the annual meeting of the State Horticultural Society, which will be held in the same place on the third Tuesday in January, 1893.

Construction of Bee-Cellars is to be the "special topic" of the October *B.-K. R.* (If anybody but an old bee-reader could guess what those three initial letters stand for, we should be very much surprised.) In the department "Among Our Exchanges" in this issue, is an item which is taken from the *B.-K. R.* It requires a mighty good *guesser* now-a-days, to understand some of the modern ways of conveying knowledge. But we will try to keep up with the crowd, even though we "miss it" occasionally.

Drones and Electricity.—Mr. F. Greiner, in *Gleanings*, in his "Cobs and Kernels," says this about the ability of drones to withstand a current of electricity :

Experiments made years ago in Germany have shown that drones cannot withstand as strong a current of electricity as workers. Would it not be simpler and cheaper, by means of an electrical battery constructed in such a manner that the strength of the current could be changed *ad libitum*, to kill all drones of a colony instantly, than to use drone-traps for the purpose ?

In Sunny Southland—the new department conducted by Mrs. Atchley, on page 428 of this number of the BEE JOURNAL—seems to please a great many. Our thanks are tendered to *Gleanings*, the *Review*, and the *Canadian Bee Journal*, for the very kind and fraternal notices they have given about our new department. Read what they say about it, in the following paragraphs:

Mrs. Jennie Atchley is conducting a Southern Department in the AMERICAN BEE JOURNAL. She has had experience in the right direction, and knows how to tell it in an interesting manner.—*Review.*

We are pleased to note that Mrs. Jennie Atchley, so favorably known among bee-keepers, has taken charge of a department in the AMERICAN BEE JOURNAL, "In Sunny Southland." There is no doubt but its many readers will profit by her writings. Friend York is leaving no stone unturned to give the readers of the AMERICAN BEE JOURNAL good value for their dollar.—*Canadian Bee Journal.*

The AMERICAN BEE JOURNAL has just incorporated in its columns a new department, called "In Sunny Southland." It is to be conducted by Mrs. Jennie Atchley, of Floyd, Tex., a well-known writer and queen-breeder. The first installment, beginning with the Sept. 1st number, is good, and no doubt will maintain its initial standard of excellence. It is a good scheme, Bro. York, especially for the far-South readers.—*Gleanings.*

Giving Due Credit to our exchange periodicals for anything that we copy from their columns, we are very particular about, and we then expect that others will be equally careful when copying anything from the BEE JOURNAL. But it seems we were led into giving a wrong credit on page 343, where we say that the clipping about a "House Apiary Like a Passenger-Car" was taken from the *Canadian Bee Journal*, when it should have been credited to the *Bee-Keepers' Review.*

We took the item referred to, from the *Michigan Farmer*, which said that in the *Canadian Bee Journal* Mr. Harker said so and so, and of course we presumed that the *Farmer* knew what it was talking about; but we find that it also was led into the same error as ourselves, for the *Canadian Bee Journal* copied the whole article from the *Review* without giving any credit whatever—simply "cabbaged" the whole thing bodily!

Whenever we make an error in crediting anything copied, we are indeed glad to have our attention called to it, for we believe in giving "honor to whom honor is due"—even to giving full credit to Mr. Devil for his deviltry. We try to follow the "Golden Rule" in all things, but, like the rest of humanity, we sometimes err, for it is truly written, "To err is human."

We trust the editor of the *Review* will have mercy upon the one who lead the rest of us into evil, and, upon proper indications of repentance, to forgive as fully as he expects to be forgiven whenever he makes a mistake.

Honey Crop in Minnesota.—Mr. B. Taylor, of Forestville, Minn., says this in the *Farm, Stock and Home*, about his honey crop, and that of Minnesota:

The honey crop at the Forestville apiary is the smallest ever secured. Ten pounds per colony is all we can expect, and we believe ours is above the average in this part of Minnesota. The entire Northwest is in pretty much the same condition. Comb, or good extracted honey, will bring a good price if well managed in marketing.

Mullein for Rheumatism.—The St. Louis *Globe-Democrat* says this about using mullein for rheumatism:

It is not generally known that a decoction of the common mullein, which grows wild in every part of this country, is a most excellent specific for rheumatism. Among the German people so much confidence is felt in it that many of them use no other remedy for this disease, and it is seldom known to fail.

Straw Bee-Hives.—Mr. Frank McNiver, of New Jersey, in the *American Agriculiurist*, gives the following description of the old "straw bee-hives," still used in some parts of Germany, we believe:

While the old straw cone-shaped bee-hive is referred to in hundreds of works on bee-keeping, and in encyclopedias, we do not now remember of ever reading any direction for, or description of, their manufacture. It may be that authors generally have considered the process too simple to need describing, for these hives are usually made of braided straw forming ropes an inch or two in diameter, and these are laid around a form of the required size, and then skewered together to give solidity, and keep the hive in shape when removed. A full size straw hive will hold about three pecks, but they are sometimes smaller. They have been generally discarded because they afford an excellent hiding place for the worms of the bee-moth, and are very difficult to keep clean, and in no way superior to hives made of pine boards, which are also cheaper and far more convenient for dividing swarms, removing surplus honey, etc.

The Honey Exhibit at the World's Fair next year should be the very best ever produced. Editor Jones, of the *C. B. J.*, has made the following excellent suggestions regarding exhibits of honey:

"For several years we exhibited 'The Lord's Prayer,' 'God Save the Queen,' and many other curiosities in connection with bee-keeping. We took the best double-calendared linen paper, printed on it in large bold type anything we wished, then dipped it in beeswax and put it through the comb foundation mill, then placed it in the hive; the bees would lengthen out the cells and fill them with honey or brood, as the case may be.

"We usually placed them where the bees would fill them with honey instead of brood, in order that the comb might be as bright as possible, then by holding this comb up to the light, you could read at the base of the cells the inscription.

"We would suggest that some of our bee-keeping friends take either this linen paper, or what is called 'tracing linen' (which is perhaps a little more expensive, but will stand more rough usage, and answer the purpose better), and on it have a good picture of Rev. L. L. Langstroth, with a short sketch of his life; then dip it in bright, clear beeswax, pass it through the mill, making a slight impression on it, hang it in the hive, and have the cells drawn out full length; take any honey out of it that may be in the cells, and have the comb on exhibition at the World's Fair.

"Why not have a fine large picture of George Washington, also Christopher Columbus? Sections of comb honey might be filled in a similar way, so that when the honey was eaten off down to the base of the cells, the pictures of gentlemen would be in the center of the section.

"Perhaps some of our ingenious friends will be able to photograph on nicely capped comb honey the picture of the purchaser or producer, or something that would make it attractive, and bring our industry more prominently before the public in this way."

The Wax-Palm of Peru exudes a wax from its leaves which closely resembles beeswax, and is used in making candles; while the wax-tree or Vismia, of Ceylon and Cambodia, produces a juice resembling gamboge, which is used as a medicine.

There's Not a Young Person but what can secure at least *one* new subscriber to the BEE JOURNAL, and get the splendid Premium offered on page 445. Try it.

When You Have any honey to sell, get some Honey Almanacs and scatter in your locality. They will sell it all in a very short time.

Among the Hummings in "The Apiary" department of the *American Farmer* for Sept. 15th, we find the following, which are interesting:

One or the first inducements for keeping bees is that honey is the most healthful sweet which can be produced. The farmer who does not keep bees loses more than he thinks.

Competition in the bee-business need not be feared, as pure honey is always salable at a remunerative price, and even the pleasure of having it for the table will pay for the trouble and time needed.

White clover stands first as a honey-plant, and linden second. The blossoms of the latter are peculiar. They are yellow in color, and arranged so that the nectar is easily gotten by the bees, and they can load up quickly and heavily.

The best method of feeding bees in winter is to give them a frame of honey. All colonies do not consume the same amount of stores, so that enough combs may sometimes be spared from those which have plenty to supply the needy.

It is said that there is less honey on the market now than at any other time since 1877. The scarcity is throughout the Eastern, Western, and Southern States, and is caused mainly by rains, drouth and cold. Nor are the prospects for a late yield promising. If this is true, it follows that good honey will command the best of prices.

A Protection for Shipping-Cases full of honey while in transit to market seems to be quite a necessity now-a-days. It is surprising that bee-keepers should be compelled to padlock their honey when shipping, and yet if we may judge from the experience of some of our honey-producers, they will have to do just that very thing.

Nice honey is so very tempting, that to see it is to desire it—even to the extent of stealing it, by some railroad employes. Of course, railroad companies should be held responsible for the safe arrival of the *whole* of a shipment to its destination—like anything else that is intrusted to their care.

Mr. C. H. Dibbern has had an experience on this subject which is interesting as well as tantalizing. He tells, in the *Western Plowman*, how to protect the shipping-cases, and to trap those who attempt to pilfer from the swee contents. Here is what he says:

"In view of the trouble we have had with thieves opening and stealing from our section-cases while in transit, we have invented a "protection" that will either stop it, or make it easier to detect the thief.

"This device consists in passing a broom wire around the case after it is packed and nailed up, and fastening the ends by winding once around a wire nail, with a leaden head. The wire should be drawn taut, and cut off quite close to the nail. The nail should be driven in well, so the head will be flush with top of cover. A few blind staples should be driven over the wire at corners to hold it in place.

"Now, the wire is only just long enough to go around the case, and catch around the nail. Should the case be opened on any side the wire will let go, and it is almost impossible to fasten it again. If it is attempted to draw the nail, the lead will be marred, showing that it has been tampered with, which will make it easy for the officials to locate the thieves.

"The leaden-headed nail is made by taking B B shot and flattening it with a hammer on a hard board, and driving the nail through it. A barbed nail is best, as it cannot be drawn out so easily. So far as we know, there is no patent on this device, and we now freely give all our rights in it to the bee-keepers of the world."

A Much-Swarmed Colony of bees is heard of. It is said that Mr. L. B. Phillips, of Walnut Grove, Ala., has a bee-hive whose colony has, within the past four years, cast 115 swarms? Who can beat that record?

Have You Read page 445 yet?

IN SUNNY SOUTHLAND.

CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

A Queen-Rearing Dialogue.

(Continued from page 397).

"Why not keep your breeder in a small nucleus, and be done with it?"

I tried that, and the bees did not seem to take hold and draw out the foundation fast enough to suit me, and I just keep my breeders in full colonies, and then everything works like a charm. Where we *must* have lots of queens, we cannot depend upon any slow, uncertain process. But, as A. I. Root says about his force gardening, we have to force things, and we must have *full* colonies to do it, that's all.

"How do you know when these cells will hatch that you are grafting there?"

Why, you see, they were eggs three days and larvæ one day, making four days, and as the queen hatches in 16 days, you see they will hatch in 12 days more. So, to be sure of things, I work them to hatch 11 days hence, and on the tenth day I remove them to nuclei prepared to receive them. Am I making all this plain enough for you?

"Yes, yes, I understand it all now. But let me ask what you are going to do with all these cells in this thing?"

You see now my cells are nearly all reared here at home, and these are placed in this little rack with their points all down. Well, the boys have fixed them that way to carry to an out yard, several miles away, and you see these cells hang in this rack just like they did in the hive, and by being careful we can carry them without injury 4 or 5 miles, and put them into nuclei prepared for them.

"How do you insert them?"

Oh, I just go along the rows about as fast as I can walk, and by the records on top of the hives I know when I come to one that needs a cell; I just open it, and place the cell down on the comb near the brood, and gently bring the next comb up just so that it will touch the cell enough to hold it. I do it so quickly that neither a smoker nor veil is needed. I do not stay long enough at a hive to sit down at all.

Well, Charles, I am now ready to go over to the Robinson yard, do you want to go?

"Oh, yes, certainly. I'm here to-day to learn, and I am 'getting there,' too, and 'don't you forget it.'"

Well, here we are. Now, if you will hitch the pony I will get things ready.

Now, here you see the record on this hive—queen sent out to Geo. Smith, Aug. 26th?

"Yes."

Well, this is Aug. 29th, so you see the queen has been out three days, and I know that the colony needs a cell.

"Why do you say "out to Geo. Smith?"

You see by that I know exactly who gets the queens from each nucleus, and I can tell long before Mr. Smith can, what kind of a queen he has, whether she was pure, and all about her brood, etc.

"Oh, yes, I see. What have you got a big shade over that one hive for, and none over the rest?"

That is a powerful colony where I keep my drones. Don't you see them flying thick? I usually keep this drone-hive queenless, too, for it might swarm away out here on this prairie, and carry off all my fine drones.

"Why don't you keep the drones in nuclei, too, and then they would not swarm?"

Oh, drones do not seem to fly nearly so active and constant from nuclei as they do from a strong colony.

"Oh, yes; I now see you believe in 'powerful colonies,' as you call them."

That's what I do. I can do more with one good, strong colony than with a half-dozen weak ones.

[To be continued.]

My Experience in Bee-Keeping.

I commenced bee-keeping three years ago, and have grown very enthusiastic. A friend gave me 5 colonies in box-hives. He said the bees troubled his stock so much at the well, and did him no good, that he wanted to get rid of them. I told him all right, and much obliged.

The next morning was a very frosty morning in April, and sunrise found me on my way home. When I got the bees I knew there was work for me, for I had never studied the culture of bees. I immediately searched the advertising columns of the papers, and in the course of a few days I found an advertisement

that read, "Everything needed in an apiary." I at once sent a postal card asking for a catalogue of supplies.

As soon as the catalogue came, I chose and ordered a Simplicity hive for a pattern to make my hives by; but by the time my pattern came, and I had made my hives and transferred the bees, the season had advanced so far that I got only a few pounds of surplus that season; but, by the way, I thought of something else when I sent for the hive, and that was, I didn't know anything about bees. So I ordered "A B C of Bee-Culture," and also an Italian queen and a nucleus.

Now, when I had reached this point, I found I had not yet started, so at it I went, the biggest lesson I ever had.

I have since then studied, manipulated and experimented, have read the AMERICAN BEE JOURNAL for more than a year, and, to sum it all up, I think I have a pretty general idea of the business. Mr. Root will please accept my thanks for the easy way and great pains he has taken to make known the mysteries connected with the business, in his "A B C of Bee-Culture."

To make a long story short, I can say that in 1890 I had 5 colonies in box-hives; transferred and got them well started, and in good condition for winter. In 1891 I learned to handle and Italianize bees, and secured an average of 40 pounds of honey per colony, and a fair increase of bees.

The spring of 1892 found me with 14 colonies, and up to the present, after a very severe early season, I have secured a reasonable crop of honey, some colonies having gathered something over 80 pounds of surplus each.

I may perhaps tell in the future something I have learned; and, if you don't watch me, I may tell something I havn't learned. W. H. WHITE.

Deport, Tex., Sept. 12, 1892.

Experiments in Queen-Rearing.

I have been experimenting for five years in queen-rearing, and with as many methods as you could guess in five minutes, and with good results. I first reared queens by the "slam-bang" method. What I call "slam-bang" is to remove a queen and let the bees have their own way in rearing or building cells.

My second method was to remove all brood from a colony, and give them eggs from my choice stock, and have cells built on the comb at any place, cut them out, and insert them in other combs in nucleus hives. I found that was a smash-up and destruction to young bees, so I abandoned that method, and then went to work to see what could be done in the way of getting cells built on strips of combs; one row of cells cut from the combs containing eggs, and then getting a comb around under the bottom and fastening one end to the left corner, and bringing it to the right and fastening the other end with the cell-cups down. Before I fasten this strip on I kill every other egg, and then I place the comb in a hive that I had prepared the day previous.

The way in which I prepare my hive is to take queen and all brood except one comb, to another point in the yard, and set up a nucleus hive. I shake all the bees from seven combs, and only leave the bees on three combs to start the new colony. Now I have a hive booming with bees to build cells.

I now take the comb I left with the brood in, move to the new hive, and leave the comb with the cell strip under the bottom with eggs, for queen-cells are all the eggs that are in the hive. I then go to other hives and get comb that has no eggs nor brood in them, and put into hive No. 1, and close it. On the fourth day afterwards I open hive No. 1, and examine the comb containing cells, when I generally have an average of about 12 cells. I then leave them until they are 12 days old, and then I cut them out and place them in a nucleus hives to hatch and be mated.

This method gives the finest cells that I ever saw, and also fine, large queens, which are very prolific. I also find that they are superior to any queens reared in any other way.

I forgot to say that when I got a row of cells sealed, I removed them to a nucleus where I had previously removed the queen for this purpose, and I insert the second comb with another row of cells, and when they are nearly completed I carry them to another hive, insert a cell of the former rearing, and have a queen hatched in the hive, and have another, or others, building cells under the same management.

I find that queens are uniform in size and color, that the bees are better workers, on an average, as well as larger and gentler. J. W. TAYLOR.

Ozan, Ark.

Friend T., your plan as given above, is similar to the Alley method, and is a good way.

QUERIES AND REPLIES.

Do the Bees Store Water?

Query 838.—1. Do bees store water in their combs? 2. If they do so, at what time of the year is it done?—Nebr.

No.—MRS. L. HARRISON.

I think not.—H. D. CUTTING.

I think not.—G. M. DOOLITTLE.

Mine never have.—JAMES HEDDON.

Not in our opinion.—DADANT & SON.

1. I hardly believe they do.—C. C. MILLER.

I have never known them to do so.—J. P. H. BROWN.

1. I have never observed that they do.—EUGENE SECOR.

1. I think not in its entirety. 2. Early spring.—J. M. HAMBAUGH.

To a small extent, in early spring before they find any nectar.—R. L. TAYLOR.

Bees carry water, but I don't think they store much in the combs.—E. FRANCE.

I have never known them to do so, but have seen the claim made that they do. I do not believe they do, however.—J. E. POND.

I have never seen water in its purity in the cells, put there by bees. I think they only carry in water as they need it.—G. W. DEMAREE.

1. That they do use water, every bee-keeper ought to know. 2. At the time of year when they need it, if they can get it.—A. B. MASON.

I have never seen any pure water in the combs stored by bees, and do not believe they store, any, at any time of the year.—C. H. DIBBERN.

I think they never do. I have handled bees for 23 years, and I have never seen any evidence that they stored water in the combs.—M. MAHIN.

Bees carry a great deal of water into the hives when actively breeding in the spring. I think they use it as they have need, for the young.—G. L. TINKER.

1. I think not. They often place water over the capped brood in hot weather. 2. Only in hot weather. They place water about their brood and combs, but I don't remember seeing water stored in combs, at all.—MRS. JENNIE ATCHLEY.

1. No; I do not think so. I never saw any signs of it. I think it is taken for immediate use. 2. They need it when breeding rapidly. It keeps them in good condition.—A. J. COOK.

I have noticed what I thought to be instances of this on one or two occasions. This was in August. I do not think it is common for them to store water in any quantity.—JAMES A. GREEN.

Much water is used by the bees, mixed with honey and pollen in rearing their young; but from their fanatic desire to find water after one or two days' confinement, we may infer that they do not have much of it in store.—MRS. J. N. HEATER.

The bees use water when breeding, and carry it to the hives for immediate use, but rarely if ever "store it."—EDITORS.

Mr. S. Stutterd, a prominent European microscopist and entomologist as well as linquist, naturalist and geologist, died recently. The *British Bee Journal* of Aug. 25th, says this about him:

It is with regret that we have to announce the death of Mr. Samuel Stutterd, which took place, after a very short illness, at Grimsby. Mr. Stutterd was a gentleman of culture and ability, and had long been connected with most of the literary and scientific institutions of the town. He took an active interest in the Mechanics' Institute, and especially in the library. He was a good "all-round man." He had a good knowledge of the best modern literature, and was an able linguist, as well as a naturalist and geologist. At one time he was secretary of the Science and Art Classes and of the Sketching Club. He was also a microscopist and entomologist. His name will be better known to bee-keepers from the fact of his having, in conjunction with Mr. H. Dieck, translated from the German that standard work by Dr. Dzierzon, entitled "Rational Bee-Keeping," which was edited in 1882 by Mr. C. N. Abbott. Mr. Stutterd was greatly esteemed by all who were acquainted with him.

CORRESPONDENCE

ON IMPORTANT SUBJECTS.

Drone-Bees and their Ways.

REV. W. P. FAYLOR.

The drone-bee is not so much looked upon now as formerly as an idler in the hive. From pulpit and pew, from wayside and home, he has been the remark of indolence. Recently a Presiding Elder in the West issued a call through a leading periodical, for some preachers to fill vacancies on his District, and concluded his request by saying, "No drone need apply."

To my mind, I believe that the drone-bee fills its sphere in life, and is just as industrious in his mission here, as any other creature. The intelligent apiarist has noticed again and again that a hive of bees with hundreds of drones has rolled the honey into the sections, while a sister colony, equal in numbers of workers, without drones, has yielded almost nothing. I now usually aim to keep some drone-comb in every hive. If I only wish drones from desirable colonies, then I keep drone-brood shaved down, and pick by hand a few dozen drones for each colony. During the honey season, or flow of nectar, drones may be shaken into any colony, and are almost always received.

The life of the drone is very short—much shorter than that of the workers. I believe that many of the drones are caught by birds and enemies of bees. Drones are more clumsy and less rapid in their flight than worker-bees, which renders them a better prey for their enemies in the air. It is fortunate for the neuters that they can fly so fast.

The drones aid in keeping up animal heat in the hive. They assist in stimulating activity. I have also some faith that they aid in carrying honey from one cell to another, and ripening the same. If we place a feeder with syrup in front of the hive, we will usually find drones in this feeder during all hours of the day, aiding as best they can to remove the contents to the cells of their combs.

HOW TO KEEP DRONES DURING DROUTH.

A correspondent from the East wishes me to give a method "for keeping drones when the honey season is past." This I willingly do.

Always aim to have some choice drones creeping out of their cells at the close of the honey harvest. Then make one or more colonies queenless, and give these emerging drones to the queenless colony, or colonies. Brood and eggs may be added once in a week or two, but look over every comb now and then to be sure that no queen gets into this hive, or hives, made queenless. Keep all queen-cells cut out before their contents emerge in the shape of virgins. Feed this colony, or colonies, well, and always feed about noon the colonies you wish drones to fly from about the time you expect virgins to come out on the wing. When there is no nectar in the fields, you will thus create activity among the workers and drones of such colonies.

At any time should you run short of drones, you can rear drones by giving a good colony nothing but drone-comb, so that the queen will be compelled to lay eggs in drone-cells. All eggs layed in drone-cells produce only drone-bees. If we remove worker-eggs from worker-cells, and place them in drone-cells, we shall get drones as a result. Whether the bees by blind instinct always extract the sperm fluid or not from worker-eggs when in drone-cells, I do not know; but one of two things must be true—either all eggs from a fertile queen must be alike, or the worker bees possess the ability to change the eggs. Our good friend, Prof. Cook, says:

"When the workers are able to abstract the sperm-cells, which are so small that we can only see them by using a high power microscope" (though he acknowledges, and so do I, that sperm-cells cannot be discovered in bee-eggs with any kind of microscope), "then we may expect to see wheat turn to chess."

That wheat will turn to chess is evident—a fact I have seen demonstrated—a change I can produce myself; but this egg process is yet wrapped in mystery. See Cook's Manual, pages 81 and 74.

DRONES MEETING A VIRGIN QUEEN.

It was my pleasure yesterday (Aug. 1st) to witness a sight I have longed to see for years—thank Providence for the privilege.

About 1 o'clock p.m. a virgin queen, urged strongly by the bees to go out of the hive of a nucleus colony, tried several times to fly, but failed. Then I caught her and tossed her up into the air, and discovered that she could not fly.

Next I picked her up, and seeing her run about on my left hand, carried her

to within about 10 feet of a queenless colony that I had just fed some honey a few minutes before, and, to my astonishment, the drones came rushing about this queen on my hand like mad hornets. One drone threw her over on her side, but she was on her feet in an instant. Several drones gave her each a tap, and then left.

In a short time the buzzing stopped, and the drones all went back to their hive. But not one of these drones left any of the sex-organs adhering to the queen. I do not know that this queen is pregnated, but I shall watch her closely for the next two days to see when she begins laying, and whether she attempts to leave the hive again.

I have believed during the past that the reason the bees from one queen vary so much in color, is because the queen on her wedding-tour meets and copulates with different drones of various stripes. Then my observation has been that only about one-fourth of the queens that become fertilized carry enough of the vital fluid with them, received from the drones, to be visible to the naked eye at all.

I have watched some virgin queens very closely, have seen them come out of the hive as many as a half-dozen times, then I have opened the hive and scrutinized the queen very closely, but could see no trace of fertilization until the next two days, then I would see the abdomen begin to enlarge, and know in this way that she had met some drones; for she would begin to lay at the appointed time.

One fact is now settled, namely, that the queen attracts the drones, and not the drones the queen. The many are attracted toward the one, and not the one toward the many.

Another truth is, that the queen must be "on the spree," or have the desired sexual-impulse to attract the drones.

A few weeks ago, when there were some 30 virgin queens on the wing one day, I observed that the drones were so excited as to fly in and out of their hives like robber bees.

Yes, reader, the drone fills his mission well in life, and if we can do as well as he, we shall feel well at the close of life.

La Porte, Iowa.

The Globe Bee-Veil, which we offer on the third page of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, at $1.00 each.

The Grading of Comb Honey.

W. Z. HUTCHINSON.

Although most farm products are graded, there have never been any general rules for the grading of honey. Naturally dark honey is seldom mixed with white honey, because, if this were done the whole lot would bring only the price at which the dark would sell, and for the same reason unfinished sections are seldom crated with the finished combs.

In reporting the market prices, dealers usually make use of the terms; "fancy," "choice," "No. 1," and "No. 2;" but there is much confusion in regard to the exact meaning of these terms. A producer may think that his honey is choice, or No. 1, but when it reaches the dealer, the latter finds it far from what the producer called it, and from this condition arise disputes and unpleasantness.

Last fall, when the Northwestern Bee-Keepers' Society met at Chicago, there was an attempt to formulate a set of rules that might be used in grading honey, and, at the meeting of the North American Bee-Keepers' Society at Albany, N. Y., an improvement upon the Chicago rules was suggested. Since then the matter has been thoroughly discussed by bee-keepers, yet there are so many points to be considered that an agreement is difficult. Possibly none will be arrived at until some set of rules has been given a trial, that actual practice may point out more clearly what is needed. After attending both of the conventions mentioned, and reading all of the discussions on the subject, I am inclined to give preference to a formula reading about as follows:

"Fancy."—All sections to be well-filled; combs straight, of even thickness, and firmly attached to all four sides; both wood and comb to be unsoiled by travel-stain or otherwise, all the cells sealed, and the honey of uniform color.

"No. 1."—All sections well-filled, but with combs uneven and crooked, detached at the bottom, or with but few cells unsealed; both wood and combs unsoiled by travel-stain or otherwise, and the honey of uniform color.

"No. 2."—Sections with comb, or both, travel-stained, or otherwise much soiled, and such sections as are less than three-fourths filled with honey, whether sealed or unsealed; and the combs containing two or more colors.

"No. 3."—All crates filled with honey not described in any of the foregoing grades.

The color of honey to be known as "light," "amber" and "dark." The crates to be unsoiled, but if otherwise, the honey in such crates to be classed in the next grade below the one indicated in the instructions. In describing honey we would then have "fancy white," "fancy amber," "fancy dark;" and "No. 1 white," "No. 1 amber," "No. 1 dark;" and "No. 2 white," "No. 2 amber," and "No. 2 dark."

Upon this point of color there has been a great deal of contention, some asserting that only white honey could be called "Fancy" or "No. 1." There are many people, however, that regard buckwheat honey as the best honey; to them there would be fancy buckwheat or dark honey. Tastes differ in this respect, and the plan of calling only white honey first-class will not be feasible.

When it is possible, to give the source from which honey is gathered, might answer instead of giving the color, if all people were as well informed as bee-keepers in regard to this matter; but, as it is, it is probably best to use the words "white," "amber" and "dark."

Uniform grades and terms will improve the price.—*American Agriculturist.*

Scientific Ignorance About Bees.

REV. E. T. ABBOTT.

My Dear Mr. York:—I hand you herewith a copy of an article which I mailed to the *Atlantic Monthly*. You can make such use of it as you deem best. Emerson T. Abbott.

St. Joseph, Mo.

[The following is the article referred to in the above:]

Permit me to offer my protest against some of the statements made in Prof. Evans' article in the February number of the *Atlantic*. The Professor seems to have a genius for making wild and extravagant assertions in the name of science (?), for this entire article is filled to overflow with statements that lead one of a skeptical turn of mind to doubt, to say the least.

I will leave it to others to criticise the improbable stories he recites about ravens, storks, etc., and confine my criticisms to a field in which I have some right to speak with authority. If his statements about birds may be spoken of as improbable—and I think they may—it will be putting it mildly to say that the statements he makes about bees are, most of them, absurd, and entirely unwarranted in the light of facts as known to every intelligent bee-keeper.

SEVERAL LARVÆ IN ONE CELL.

Take the following: "In order to provide for emergencies, several larvæ are reared in a single cell, which the old queen is never permitted to approach." It is a matter of great interest to every bee-keeper, who has read this statement, to know where the Professor got his information. Surely, if it is a fact, he is entitled to the honor of having made an original and unique discovery. I am fairly well acquainted with the reliable literature on the subject of bee-culture, and I am quite sure that this is the first time I have ever chanced to meet a statement like this.

I also profess to know something about the economy of a bee-hive, and I am willing to risk my reputation for truth and veracity on the statement that no man, living or dead, ever knew more than one larva at a time to be reared in a cell. I should look upon this statement of the Professor's as an attempt to be funny, if I did not know that he had the reputation of being a careful writer. If this reputation was acquired by making such wild and improbable assertions as he does about bees, I confess it does not speak well for the intelligence of his readers.

He tells us that the workers are "incapable of laying eggs;" but they do lay eggs all the same, and it is a question whether there is a single worker-bee living that cannot lay eggs under certain conditions. It is true, they do not make a business of laying, to use the parlance of the street, but this is not proof that they *can* not. On the other hand, we have abundant proof that they can, and frequently do, lay eggs.

HONEY-BEES IMPROVING THEIR METHODS.

He informs us that the honey-bees have "improved their methods of work in the memory of man." This sounds very plausible, and I have no disposition to call in question the theory of evolution with which this statement is supposed to be in harmony; but the statement itself, in my opinion, is not true.

History has not recorded a single radical change in the habits of bees. So far as we know, they build their combs

in the same way, and with the same mathematical exactness that they did ten thousand years ago. They gather pollen, honey and propolis, and perform all the economy of the hive in the nineteenth century exactly as they did in the morning of creation, when they first evoluted into bees, or were created full-fledged and perfect—I do not care which theory you hold ; the fact remains that they are to-day where they began as bees, and history records no change in the "memory of man," or any other time. Darwin knew this, and therefore he said, "The hive-bee is the least variable of all domestic animals."

The Professor also rehashes an old story, which is known among bee-keepers as the "Wiley lie." I refer to his statement about "manufactured comb." This has gone the rounds of the papers of the country so long, and has been denied and proven to be false so many times, that it greatly surprises one that a man of any reputation would repeat it, or a well-known and popular journal like the *Atlantic Monthly* publish it. In the name of thousands of honest, earnest, and industrious bee-keepers, I want to protest against this statement being repeated again, and I trust you may think proper to give the denial as wide a circulation as you have given the false statement.

Permit me to call your attention to the inclosed article which appeared in the *Popular Science Monthly* for May.

NONSENSICAL "SCIENTIFIC" EFFUSIONS.

The Professor's effusions about "bee communities relapsing into barbarism," "barricading the entrance of their hives ;" also "making of deep, narrow gateways," etc., sound like the poetical dreamings of a half-educated savage, and make one think of the science, so-called, and literature of the Dark Ages. There is a good deal of imagination and very little truth in them, therefore, they do not deserve a place in the literature of this age of facts and figures.

Had he ceased to draw upon his imagination here, he might have been excused on the plea that he was trying to write a poetical prose ; but he gives the wings of his imagination full liberty, and takes still higher flights than any at which I have hinted. Witness the following :

THE MOTHER-HIVE AND HER COLONIES.

"It is undeniable that, in the life of the honey-bee, a sort of historical connection exists between the mother-hive and her colonies. This sense of kinship extends to the colonies of colonies, and thus gives rise to something like international relations between a large number of apian communities, which share the friendships and hatreds of the original stock, and transmit to their posterity."

Lenz, he tells us, relates his experience on this point. Some of his hives being blown down by the wind, he hastened to set them up. The bees saw him thus engaged, and, regarding him as the cause of the disaster, stung him. For years afterward they pursued him whenever he approached the hives. This unjust antipathy was inherited by all the swarms which issued from these hives, and formed colonies elsewhere.

It is wonderful how much use this learned savant has made of this little accumulation of what he evidently supposes to be facts. He probably sold it to the *Popular Science Monthly* for so much a line, and, no doubt, drew upon you for a like sum ; and, for all I know, he may still be sending it out to noted journals for such pay as his reputation will command, on its mission of enlightening the earth. Yet, there is not even a shadow of truth in it.

In three days after a swarm has issued from the hive, should one of the bees belonging to it return to the parent colony and attempt to enter the hive with a view of helping herself to the honey, some of which she had gathered, she would be immediately informed that she had no rights there. Should she persist in her attempts to enter the hive, she would be severely chastised, if not killed outright.

Lenz, to whom the Professor refers, may be authority on some things, but I do not hesitate to say that he is not authority on the habits of bees. I submitted the question of the authority of Lenz and Wundt (whom Prof. Evans quotes as backing up his extraordinary statements), to one of the ablest living writers on the subject of practical bee-culture, and a man well posted and thoroughly acquainted with all the literature extant on the subject. He replied :

"I went to my library and opened Bastian, whose book contains a bibliography of the authors of bee-culture, with the title of their works since 1568, to find the names of Lenz and Wundt, but Bastian did not mention them, although his bibliography contains the names of more than 400 bee-writers. My researches," he says, "in the books

of Baron von Berlepsch and Dzierzon were equally fruitless, notwithstanding these writers quote a great number of authors in their books."

Sir John Lubbock says, "I doubt whether bees are in the least fond of one another. I have not been able to discover any evidence of affection among them. They appear to be thoroughly callous, and utterly indifferent to one another."

TRADITIONS (?) AMONG BEES.

Prof. E. tells us that the bees that suffered the supposed wrong never forgot it, and communicated their feelings to their descendants by way of tradition (!). If communicated at all it was by tradition, for the bees that did the stinging were all dead in two months at most, if it was in early spring, and they did not live more than six months at best.

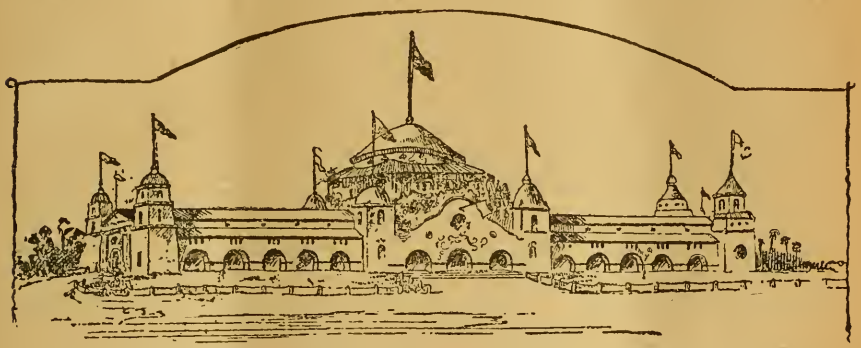
Then, again, they never had any posterity to which they could transmit this ill-feeling, for the queen that laid all the eggs, from which the future inhabitants of the hive were hatched, knew nothing of the stinging unless the worker-bees told her about it. Then in order to hand it down, even as a tradition, it would be necessary for her to tell the young bees and queens about it as they came into the world, and thus it would go down from generation to generation. This seems quite "fishy" to an ordinary mortal, but it may be good science in the country where Prof. Evans lives.

So far as the transmission of tendencies in the bee-hive is concerned, Darwin settled the matter a long time ago. He says, "Peculiar habits confined to the workers, or sterile females, however long they might be followed, could not possibly affect the males and fertile females, which alone leave descendants. I am surprised that no one has hitherto advanced this demonstrative case of neuter insects, against the well-known doctrine of inherited habit as advanced by La Marck."

I know of no more fitting language to apply to these statements of Prof. Evans', in closing this long article, than that which the Professor himself has furnished us, in the early part of his article, in speaking of the positions of the late Prof. Von Prautl, "The weak point of these speculations is, they are too exclusively metaphysical, constituting a logical and systematic exposition of conception, or notions without that accurate and exhaustive observation of facts which acuteness of analysis and no vigorous process of pure thinking can supply. Prautl," he says, "is ignorant of the habits and aptitudes of animals."

So far as bees are concerned, Prof. Evans seems to be suffering from an attack of the same disease.

St. Joseph, Mo.



California State Building at the World's Columbian Exposition, in 1893.

Bee-Questions by a Beginner.

E. S. MILES.

Last spring I got a swarm of bees in the woods, by taking a portion of the tree. The next day they swarmed out. We caught and hived them in a movable-frame hive. The next day after, they swarmed out of that, and we hived them again, and put a queen and drone trap on. They swarmed out a couple of times after that (leaving the queen—

they only had a few drones), and then went to work.

I did not pay much attention to them for several weeks, supposing them all right (they had a new hive with foundation) until I noticed they were flying hardly any. On looking them over I found a very light colony, with only about as much comb as they had a few days after being hived, little brood and eggs, and practically no honey.

On the bottom of the frames and covers of the hives I found two or three dozen whitish or lead-colored worms, from ¾ to 1½ inches long, with dark-colored heads, fattish, and good crawlers, smooth, with no hair on their bodies.

Are these the young of the bee-moth? What can I do to get rid of them, and prevent them in other colonies? I have looked them over several times, dipped the bottoms of the frames in hot water, and put the bees into a new hive. I found, just the other day, 3 or 4 worms (always on the bottom of the frames). I scalded them again, and put the bees in another new hive. I have never seen any worms on or in the combs.

Since buckwheat and smart-weed are in bloom, these bees have built some more comb, and have stored quite a little honey. I also gave them a good frame of brood and partitioned them off with a division-board. They have a laying queen, and are getting a little stronger in workers all the time.

I also found at one time a gray-colored moth, or miller, about one inch long, under the cover of this hive, and one once under the cover of a box-hive I have.

Last spring was a hard one on bees in this locality, but the summer has been a good one, I think. Of course, I am only a beginner, and therefore not much of a judge.

Denison, Iowa, Sept. 2, 1892.

Mr. J. A. Green, of Dayton, Ills., to whom was referred the above questions for reply, has kindly given his opinion as follows:

It would be impossible to say why the bees should have swarmed out so persistently, without knowing the exact circumstances. Bees will often leave the hive in which they are placed because it is too small or too large, or because there is some bad odor about it, or for a dozen other reasons. One of the most common causes of swarming out, is a hive that has been left out in the hot sun until it is more like an oven than an inviting home.

In some of your manipulations you probably killed the queen, or she was superseded soon after the swarm was hived. During the interval that it took to rear another queen, the colony, not having any accessions of young bees, dwindled rapidly in numbers so that before the progeny of the young queen began to hatch out, only a small proportion of the original colony was left.

Or, it may have been that the honey-flow ceased so soon after you hived them that they were unable to build more comb. Bees consume large quantities of honey in secreting wax to build combs, and if the daily supply is only sufficient for daily needs, or less, little or no comb will be built, nor will foundation be drawn out. The queen is thus restricted in egg-laying for want of cells in which to deposit her eggs, so that the strength of the colony is not kept up. As you say you found little honey in the hive, the latter explanation is perhaps the more probable.

The worms you found on the bottom of the hive were the larvæ of the wax-moth, the perfect insect being the miller you saw. The way to keep them out of your colonies is to get Italian queens and Italianize your bees. Strong colonies of common bees are seldom injured to any extent by moths, but even the smallest colonies of Italians are proof against them, as they are so much more energetic than the common German or black bees. Moth worms are to be found in the combs of nearly all common bees during the summer, but such things are a rarity in an Italian apiary. This, too, is one of the least important points in which the Italians are superior to the blacks. J. A. GREEN.

Appropriations for Apiarian Statistics.

HON. J. M. HAMBAUGH.

It is with pleasure I have the honor of addressing you in accord with the kind request of your worthy Secretary upon the subject of "A State Appropriation for the Collection of Statistics and Dissemination of Information in Apiculture." Truly, this is a subject that commends itself to the consideration of every fair-minded man who has the weal of his fellow-man sincerely at heart.

It is universally conceded that apiculture is one of the legitimate industries of our land, and while it may not rank

as high in a financial point of view as some of our sister industries in point of finances invested and annually received and disbursed, yet, when the relationship of our industry is considered with that of horticulture, floriculture, and the many seeds and grasses of our country, to say nothing of the products furnished our markets in the way of honey and beeswax, we will find, when unbiased investigation is given, the subject of apiculture is one of the most important on the category of industries.

All subject-matter given in the direction of the dissemination of knowledge upon this important subject will be a boon to humanity and should be given the widest possible circulatiou.

I am not sure that any argument could be presented, that would insure the clemency and favorable consideration of our law-makers upon the simple grounds of the importance of the pursuit in the visible financial consideration of the industry considered within the scope of its own product.

It is by no means a new theory, that the sexual transmissions of plant-life is carried on largely by the visitations of insects during the time of their blooming, but that the education of the masses upon this important subject in the past has been sadly neglected is very apparent; and as we advance in wisdom and intelligence these once mooted questions will become standard facts, and the vocation of bee-keeping will be nurtured as one of the leading and most useful industries in our land.

In order to present this matter in its most impressive form to the members of the General Assembly, you must enlist one of its members in your service, who is thoroughly conversant with the routine of legislative work, and who will be painstaking in every particular. He must know there is no flaw in his Bill as presented, and when it is once consigned to the Committee on Appropriations, he must be able to show by outside pressure that the bee-keepers are in earnest.

There should be a committee appointed by your State society, composed of the representative bee-keepers of your State, to go before the Committee in behalf of the Bill. The bee-keepers composing the constituency of the various members of the Committee on Appropriations should also write letters to their members soliciting their vote in its favor.

Another very important matter will be to secure the services of the members of the State Horticultural Society, and have them make an appeal, in person if possible, and if not, by letter, to the Committee, which you will find will bear great weight for favorable consideration in the minds of the various members composing that body.

It is an important point to secure as early action as possible on the part of the Committee, and should you succeed in having it returned back to the House or Senate (as the case may be) with the recommendation "that it do pass," you can consider half the battle won.

It should be remembered, however, that every Bill presented must go through the same routine in each branch of the Legislature; hence the necessity of early action on the part of the Committee, and having it placed upon the calendar.

All appropriation bills are granted the right of way over all other bills, hence there is but little danger but some disposition will be made, should it ever get out of the committee room.—*Read at the Missouri State Convention.*

Spring, Ills.

The Honey Crop a Fair Average.

F. R. MANNING.

The honey crop is a fair average this summer. There was an abundance of white clover, the roadsides and pastures being white with bloom, and the bees made good use of it. My bees have gathered, as near as I can figure it, 65 pounds per colony, of white clover honey, and what the fall average will be I cannot tell. The prospect is good in this section for a large yield of fall honey, as the corn-fields are covered with the big smart-weed.

My apiary is in the yard between the house and work-shop, and in passing from and to my shop, it makes me rejoice to hear the humming of the little workers as they go and come from the fields. I have just 100 colonies, and nearly all hybrids.

On July 27th, I put the strongest colony I had on a pair of scales in the evening, and balanced the scales; and on the evening of the 28th I balanced the scales again, and there was a gain of 14¼ pounds. How is that for one day's work from hybrids?

It makes a bee-keeper rejoice to get a good crop, as in this section there was no honey the last two summers, and the honey this summer, I think, is the nicest I ever saw. The sections are filled square and full.

Last year my bees gathered but very

little of the black honey, and I think the most of my colonies had some of that to winter on, and those that had it came out in the spring in as good condition as those that had honey that was gathered from Spanish-needle and smart-weed.

I usually winter my bees in the cellar, but last winter I left them on the summer stands, packed with chaff, and they came out in fair condition in the spring. Out of 75 I lost only 2, but through April 4 were robbed, so that left me 69. I increased to 100, and that is as many as I want to attend to and do the work right.

The prospect is good for the bees to gather a good quality of honey to winter on, and I hope that we will have good, strong colonies to start with next spring.

I think that the prospect is better for the bees to winter than it is for the bee-keepers in this section, as there are no potatoes, cabbage or vegetables to speak of, of any kind; and as that stuff is the back-bone for the Dutch and Irish, I often think how cruel it is to abuse the little honey-bee, as there is no other living thing on earth that will gather the honey and store it in the sections for the bee-keeper, for there are thousands and thousands of pounds of it in the fields, and it would stay there if it were not for the honey-bee.

Reynolds, Ills., Sept. 12, 1892.

Bee Journal Posters, printed in two colors, will be mailed free upon application. They may be used to advantage at Fairs over Bee and Honey Exhibits. We will send sample copies of the BEE JOURNAL to be used in connection with the Posters in securing subscribers. Write a week before the Fair, telling us where to send them. We would like to have a good agent at every Fair to be held this year. Here is a chance for a live man—or woman.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 447, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Read our grea offer on page 445.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

Oct. 4.—Capital, at Springfield, Ills.
C. E. Yocom, Sec., Sherman, Ills.

Oct. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.

Oct. 18, 19.—Illinois State, at Chicago, Ills.
Jas. A. Stone, Sec., Bradfordton, Ills.

Oct. 19.—N. E. Ohio, N. Penn. & W. New York at Sagerstown, Pa.
George Spitler, Sec., Mosiertown, Pa.

Nov. 28.—Allegany Co., at Angelica, N. Y.
H. L. Dwight, Sec., Friendship, N. Y.

1893.

Jan. 13, 14.—S.W.Wisconsin, at Boscobel,Wis.
Edwin Pike, Pres., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

REPORTS, PROSPECTS, ETC.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Pretty Good Fall Honey-Flow.

There has been a pretty good fall honey-flow, as predicted by W. T. Falconer sometime ago. Bees have stored an average of 20 pounds of comb honey per colony in the last two weeks, besides filling up the brood-chambers. Most of it is gathered from Spanish-needle.

EDW. SMITH.

Carpenter, Ills., Sept. 19, 1892.

Report for the Season.

September 16th closes the honey season in this vicinity. July and August were exceedingly good months for bees. The 20 years that I have been in the bee-business I never saw basswood trees

so full of blossoms as the past season, and it yielded large quantities of honey. Golden-rod blossomed nicely, and the hot days we have had kept the bees in the sections. I shall have no unfinished sections to keep over. I have had a large lot of honey to sell at 20 cents a pound.

I keep part Italians and part black bees. I prefer the black bees to Italians for comb honey. I am honest about this. I love the beautiful Italians, and take pride in showing them to friends that call to see me; but when we come to section honey, I would rather have the black bees to work for me.

White clover was a total failure with us this season. May and June were two wet months, and bees had hard work to gather honey enough to live on and keep up brood-rearing. The new growth of white clover that has come up abundantly this season gives us encouragement to look for a big honey season next year. C. A. MARSH.

Sharon, Vt., Sept. 16, 1892.

Hopes for a Better Season Next Year.

This season has been the poorest in 20 years for bee-keepers here in the East; but we live in hopes of a better one next year. WM. W. CARY.

Colerain, Mass., Sept. 19, 1892.

Enough Honey for Wintering.

Again we have no honey crop. Fortunately, however, the bees will have enough to winter on. E. J. BAXTER.

Nauvoo, Ills., Sept. 19, 1892.

Bees in Fine Condition—Honey-Plants

My bees have only made a living so far. From 9 colonies I have obtained only 67½ pounds of extracted honey, and 2 swarms. I have visited some few small apiaries of this (Cocke) and Hamblin counties, and find that there is no surplus honey here. My bees are in fine condition for winter, and I am expecting to get some honey yet from golden-rod and from a weed that blooms just before frost—we call it "white-top" or "frost-weed."

We have a fine place for bees, with plenty of timber to get honey from, viz: The poplar commences to bloom the first of May, and lasts about three weeks; then we have the clover that the bees work on, but they do not get much honey from it; then about June 10th the basswood blooms; then the sour-wood commences immediately after the basswood, and lasts until about the first of August. The chestnut blooms in June, from which we get honey sometimes. We also have the maple, the holly, and the black gum. In the fall we have the smart-weed, Spanish-needle, butter-weed, golden-rod, frost-weed, and plenty of other varieties which are too numerous to mention. WM. WEBB.

Sutton, Tenn., Sept. 12, 1892.

Plenty of Stores for Winter, Etc.

This has not been a very prosperous season for the apiarist. I started with one colony, increased to 4, and took off 40 pounds of comb honey. I had one swarm on May 6th, one on the 12th, and a swarm from the first swarm on June 20th. All have plenty of stores to winter on.

I captured a swarm of Italian bees 3 years ago this summer, and clipped the queen's wing. They did not swarm last summer, and I took off 61 pounds of comb honey. This same queen swarmed on May 6th, and a second time on June 20th. The hive is very full of bees and brood, and not 20 drones in the hive. Now, I am sure this queen is 4 years old. Who can produce a queen to beat this one? N. W. SHULTZ.

Shreve, O., Sept. 12, 1892.

Heart's-Ease and Buckwheat Honey.

I have 27 colonies of bees, and obtained, this year, 1,200 pounds of comb honey from heart's-ease and buckwheat.

JAS. W. TOWNLEY.

Octavia, Nebr., Sept. 16, 1892.

COMBED AND EXTRACTED.

Carbolic Acid for Uniting Bees, Etc.

Carbolic acid may be used to good advantage in uniting colonies, or in driving robbers away from a hive that is being robbed. The manner of using is in the form of a solution, one part of acid to seven of water, with one-half dram of glycerine added to each ounce of the mixture. The glycerine holds the acid

in suspension, and makes a clear solution. The mixture is applied with an ordinary atomizer, such as is used for spraying perfumery.

When wishing to unite two or more colonies, I spray the entrances of the hives, say 24 hours before uniting, and the travel of the bees to and from the hives during this time gives all the bees the same odor. I have for three seasons been practicing this mode of uniting, and have yet to see the first quarrel.

My former method of uniting was to place one body containing the bees over another with a sheet of wire screen between, leaving the bees in this shape say 24 hours, when they would all be scented alike, then removing the screen. This plan worked well, but the trouble was that when the weather was hot a great many bees would worry themselves to death; besides, it is more work than the spraying plan.

In cases of robbing I have broken them up almost instantaneously by use of the same application. I generally place some straw or grass over the entrances, and thoroughly spray the same; also the sides of the hive. This completely changes the odor, and has had the effect of baffling the robbers.—J. F. SHIRK, in *B.-K. R.*

Who'll Accept this Challenge?

Dr. Edward Everett Hale, who has lived in Boston all his life, says:

"I like to put myself on record also as saying that all the poverty, all the crime, and all the vice which attract public attention in Boston, among what we call 'the poorer classes,' may be ascribed to the free use of intoxicating liquors. I have said a hundred times, and I am willing to say it again, that if anybody will take charge of all the poverty and crime which result from drunkenness, the South Congregational Church, of which I have the honor to be the minister, will alone take charge of all the rest of the poverty which needs 'out-door relief' in the city of Boston."

The Change of Nectar to Honey.

The experiment of Schonfeld, in Germany, seems to prove that the ripening of honey, or the change from nectar to honey, is a process of evaporation only. Dzierzon, however, thinks that this condensing process is performed by the direct action of the bees. He says: "It seems we can reasonably suppose that the honey-stomach of the bee is like a filter, allowing the water to pass through its walls. I believe nectar would much sooner turn sour than thicken to the consistency of honey inside of the hive." Schonfeld, in his experiment, formed a colony of young bees only, which he knew would not and did not go out in search of food. To this colony he introduced a comb filled with sugar syrup, but inclosed in wire cloth. Then he fed this colony the same kind of thin syrup. At the end of seven days the fed and stored syrup was compared with the screen-inclosed syrup, and only an insignicant difference was ascertained in favor of the first named. The syrup in the inclosed comb had not soured, and was so nearly of the same consistency that Von Planta, who made the analysis, thinks it questionable whether, in this process of concentration, the organization of the bee plays any part at all.—F. GREINER, in *Gleanings.*

Study of Honey-Producing Flowers.

There is no subject of more importance to the bee-keeper, nor is there one that gives him more pleasure, than the study of honey-producing flowers. No matter whether they bloom in the garden, the field or forest, or perchance along the roadsides, if bees gather honey from them, they at once become an object of much interest and special investigation. The question of bee-forage is one that every one engaged in bee-keeping should investigate, for upon the amount and duration of honey-producing plants in the vicinity of the apiary depends the success or failure of the enterprise.

In locating an apiary for honey production, one should have an eye to the amount of bee-forage in reach of the location, for no amount of labor and skill in manipulation of our bees will pay where it is wanting. If situated in a poor location, and we wish to take up bee-keeping, we can help much by sowing buckwheat and Alsike clover, and interesting our neighbors in this direction also.—G. M. DOOLITTLE, in *National Stockman.*

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 447.

Don't Fail to read all of page 421.

AMERICAN
ESTABLISHED IN 1861
OLDEST BEE PAPER IN AMERICA
BEE JOURNAL

PUBLISHED WEEKLY BY

GEORGE W. YORK & CO.,

At One Dollar a Year,

199 RANDOLPH ST., CHICAGO, ILLS.

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Always State the Post-Office to which your paper is addressed, when writing to us.

Special Notices.

The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription to the *end* of next December :

Wallace Porter Dec92
Suffield, Portage co, Ohio

The Convention Hand-Book is very convenient at Bee-Conventions. It contains a Manual of Parliamentary Law and Rules of Order for Local Conventions ; Constitution and By-Laws for a Local Society; Programme for a Convention, with subjects for discussion, and about 50 blank pages, to make notes upon. It is bound in cloth, and of the right size for the pocket. We will present a copy for one new subscriber to the BEE JOURNAL, with $1.00.

An Apiary Register is a splendid book to have in an apiary, so as to know all about any colony of bees at a moment's notice. It devotes two pages to each colony. We will send one large enough for 50 colonies, for $1.00, post-paid ; for 100 colonies, for $1.25 ; or for 200 colonies, for $1.50. After using it for one season, you would not do without it.

The Premiums which we give for securing new subscribers to the AMERICAN BEE JOURNAL, are intended as pay for *work done* in getting new names among your friends and acquaintances, and are not offered to those who send in *their own* names as new subscribers, unless such name or names form a part of a club of at least three subscribers.

A Binder for preserving the copies of the AMERICAN BEE JOURNAL as it arrives from week to week, is very convenient. You should have one, as it is so handy for reference from time to time. We mail it for only 50 cents, or will give it as a premium for two new subscribers, with $2.00.

When Talking About Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we offer some excellent premiums that you ought to take advantage of.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	*Club.*
The American Bee Journal	$1 00	
and Gleanings in Bee-Culture	2 00	1 75
Bee-Keepers' Review	2 00	1 75
The Apiculturist	1 75	1 65
Bee-Keepers' Guide	1 50	1 40
American Bee-Keeper	1 50	1 40
Canadian Bee Journal	2 00	1 75
Nebraska Bee-Keeper	1 50	1 35
The 8 above-named papers	6 25	5 25
and Langstroth Revised (Dadant)	2 40	2 25
Cook's Manual	2 00	1 75
Doolittle on Queen-Rearing	2 00	1 65
Bees and Honey (Newman)	2 00	1 75
Advanced Bee-Culture	1 50	1 40
Dzierzon's Bee-Book (cloth)	2 25	2 00
Root's A B C of Bee-Culture	2 25	2 10
A Year Among the Bees	1 50	1 35
Convention Hand-Book	1 25	1 15
History of National Society	1 50	1 25
Weekly Inter-Ocean	2 00	1 75
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Orange Judd Farmer	2 00	1 75
Farm, Field and Stockman	2 00	1 75
Prairie Farmer	2 00	1 75
Illustrated Home Journal	1 50	1 35
American Garden	2 50	2 00
Rural New Yorker	3 00	2 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Almost Every Bee-Book that is now published we mention on the second page of this issue of the BEE JOURNAL. Look over the list and select what you want. For every new yearly subscriber that you secure for us at $1.00, we will allow you 25 cents, to apply on the purchase of any book we have for sale. This is a rare chance to get some valuable apicultural reading-matter, and at the same time aid in spreading helpful apiarian knowledge among your friends.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a nice, 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25 cents, or will be given for one new subscriber, with $1.

One-Cent Postage Stamps are preferred by us when it is necessary for any of our subscribers to send stamps in place of paper money, Express or Post-office Money Orders, or drafts on New York or Chicago. The Express Money Orders, or Post-office Money Orders, are the safest outside of drafts. Do not send checks on your local banks as it costs us 25 cents each to get them cashed here. Postal Notes are no safer than cash put into the envelope, so do not waste your money in buying them, but get a Money Order instead.

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Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—To sell, good Apiary and Fixtures at Pattonsburg, Mo. Good location. Address, G. F. TUCKER.
1tA4t Yellville, Ark.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. DEVOTED EXCLUSIVELY—TO BEE-CULTURE. Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., OCTOBER 6, 1892. NO. 15.

"**The Sweetest Lives** are those to duty wed,
Whose deeds, both great and small,
Are close-knit strands of unbroken thread
Where love ennobles all.
The world may sound no trumpets, ring no bells—
The Book of Life the shining record tells."

Strong Colonies, with plenty of healthful stores, are important essentials in safe wintering of bees.

Mrs. L. Harrison will give some excellent hints on "Fall Work in the Apiary," in next week's BEE JOURNAL. Look out for it.

The Old Reliable has simply been "renewing its youth" the past week. That's all. Though born a year before its present editor, it seems only a bright "youngster" to-day.

How Many Queens did you rear this year? is asked by the *Bee-Keepers' Review*. It will publish the replies given by queen-breeders, together with a list of the names of those who respond.

Our Prof. Cook—we mean the bee-keepers' Prof. Cook—is a very busy man at the Michigan Agricultural College. He has 50 students daily to look after, and furnish "intellectual pabulum" on various subjects. What a glorious opportunity for moral influencing, as well as giving educational aid. The Professor must indeed have his hands and heart full.

Dr. Marshall, of Marshall, Tex., is biographically represented on pages 458 and 459 of this number of the BEE JOURNAL. We love to honor those who have helped to place the art of bee-keeping upon the elevated plane which it occupies to-day. Dr. Marshall is one of them. Read his biography, and go forth to imitate him and others like him.

Langstroth's Annuity Fund which was formed a few years ago, is thus noticed in a letter received from its originator, we believe, Dr. C. C. Miller:

An Open Letter to the Friends of Father Langstroth:—

Four years ago an effort was made to get up a small annuity for Father Langstroth, in the shape of a free-will offering from his friends. In order that it might be entirely spontaneous no names were published. Although a smaller sum than desired was raised, yet there was a hearty response from quite a number, some saying that a larger amount would be sent, if necessary. But it appears that through forgetfulness, or whatever cause, quite a number have

failed to send the annual amount promised.

The object of this communication is not to urge the claims of the man who has done so much for bee-keeping. Those claims are too well known. It is only to stir up by way of remembrance, with no desire that any should contribute who are not entirely cordial in the matter.

But whatever is done, should be done quickly. Life is uncertain, and the days of our benefactor cannot be many, at the most. Besides, the needs of the present should be met, and if promptly met now, they may become less as the grandsons of Father Langstroth are more and more able to become his protectors. So, if you want to act when it will do the most good, now is the time. Don't send any money to me, but send direct to Rev. L. L. Langstroth, 120 Ford Street, Dayton, Ohio.

C. C. MILLER.

Let there be a prompt response to the above gentle reminder, not only from those who have subscribed to the "Annuity Fund," but from *all* who desire to show their esteem for Father Langstroth, and appreciation of his great value to American bee-keeping. But for his timely and marvellous invention of the movable-frame hive, bee-culture today might still be carried on unprofitably in old-time box-hives and log-gums.

Father Langstroth has been the apiarist's greatest benefactor, and now, in the evening of life, he should not be permitted to want for anything that lies within the power of modern bee-keepers to provide. This is not charity—it is a *debt* we all *owe* to the "Father of American bee-keeping." Let's pay up!

Preparing Bees for Winter.—Don't delay the matter of getting the bees in proper condition for winter. A good crop of honey may depend upon that very thing. It pays to plan ahead, and especially in bee-keeping, where there is so much uncertainty involved.

Mr. B. Taylor, of Forestville, Minn., in writing on this subject, advises plenty of honey, young queens, and a number of bees as the great considerations. Where the hives do not contain at least 20 pounds of sealed stores, the bees should be fed sugar syrup up to that weight. The feeding should be done as early as possible, so as to be well sealed before cold weather. At the Forestville Apiary extra care will be taken to have all colonies in first-class condition for next year's work.

Fumigating Comb Honey, Bro. Hutchinson says in the *Review*, is something he has never had to do, though many others have been compelled to do it. Mr. Doolittle writes *Gleanings* that the proper amount of sulphur to use is four ounces to every 75 cubic feet in the room. Put some ashes in the bottom of a kettle, then some coals, and after this the sulphur. Hurry out of the room, peep in the window, and as soon as the last fly on the window stops kicking, wait five minutes, then open the windows and allow the fumes to pass out.

"The Winter Problem in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apiary. Price, postpaid, 50 cents; or given as a premium for getting two new subscribers to the BEE JOURNAL for a year. Now is the time to read this pamphlet, and thus prepare your bees properly for winter. Send to us for a copy.

Mr. Chas. Dadant gave us a delightful call one day last week. He was returning from a 6-weeks' vacation up in Put-in-Bay, and looked as if he had been enjoying himself in the cool regions of the north. He is the senior member of the firm that are the largest comb foundation manufacturers in the world—at Hamilton, Ills.

Supply Factory Burned.—Mr. J. W. Bittenbender, of Knoxville, Iowa, we regret to learn, was burned out on Sept. 28th. We copy the following from a local newspaper report of the fire:

At a few minutes after 12 o'clock yesterday (Sept. 28th) the alarm of fire was given, and it was soon ascertained that the manufacturing establishment wherein J. W. Bittenbender & Co., manufactured apiarian supplies, was in flames. They were putting in a new engine and boiler, and had just fired up, and it is supposed that the fire originated from a spark which ignited the roof of the old building. When it was discovered, it had but just started, and an effort was made to put it out, and nearly succeeded, but the roof was so dry, and the wind so strong, that it got beyond the control of the men, and the building was soon enveloped in flames.

Considerable lumber, the honey-house and factory were consumed. The loss cannot now be fully estimated, but will amount to some $3,000 or $4,000, without any insurance.

It is a very severe loss to Mr. Bittenbender, who has worked hard to build up a paying business, and was just in shape to fill all orders for supplies.

In a private letter from Mr. Bittenbender, dated Sept. 29th, he says:

We will rebuild with brick, and much better than before. We always carried half insurance, but 16 days ago the company rejected our insurance on account of our building being of wood material. We had made arrangements to put iron all around it, and it was to be commenced in a few days.

Our buildings are a total loss. We saved about $1,000 worth of machinery, with a stock of linden lumber of 60,000 feet, to start with again.

The Stray-Strawer of *Gleanings*—our good friend, Dr. C. C. Miller—always has a head of plump grain attached to every "straw" that he "grows."

A farmer who, one spring, was complimented upon his sleek and fat horses, said, "Why, I fed 'em only oat-straw all winter, and then it *wasn't half-thrashed!*" No wonder his horses were so fat, if they had oat-straw with over half the grain in it. Well, that is just the way with Dr. Miller's "Straws"—only they are clean, straight, and *wholly unthrashed*, and that's why there is so much "intellectual fattening" in them.

In *Gleanings* for Sept. 15th, we find the following, which we select as samples of what the Doctor there has "strawn:"

"Hope springs eternal in the" bee-keeper's breast. I'm getting my bees in good shape for the flood of honey next year.

What is travel stain? If it's dirt from the feet of the bees, how do they get their feet so dirty when working on clean white flowers?

Young queens wrong end foremost in queen-cells have been unusually plentiful this season. Last week we found three of them on one comb.

Double-tier shipping-cases are used by Frank Rauchfuss, a piece of corrugated paste-board being placed in the bottom of the case, one between first and second tier, and one over second tier. Good idea.

Shaving-soap is not a necessity, even for those who shave. I have used none for some time. Give the beard a good rubbing with the end of a towel dipped in hot water: strap your razor, then rub the beard again, and see if it doesn't go just as well without the soap.

A writer in *Deutsche Imker* says he made continual use of honey for catarrh, only to find the difficulty aggravated. He then tried it reduced with milk or lukewarm water, and was astonished at the beneficial results. Two table-spoonfuls of honey in half a pint of water at bedtime.

Honey consumed by a colony wintered out-doors, says the *Imker*, averages for October, 2 pounds; November, 1 pound; December, 1 pound; January, 2 pounds; February, 3 pounds; March, 4 pounds; April, 6 pounds; total, 19 pounds. But you cannot tell which colonies will go below or above the average, so the safe way is to allow 50 per cent. more.

This season is unusual at both ends. Clover unusually abundant in bloom, but a failure as a honey-yielder, preceded by the most wretched spring I ever knew, made the first end of the season one long to be remembered; while at present, and for some time preceding this

5th of September, the bees are just rolling in the honey from buckwheat and cucumbers, and crowding the queens.

Salt codfish ought to have a law to protect it from the cruelty of cooks. It is barbarous to boil it—makes it hard and tough. Soak until fresh and thoroughly softened, then merely *warm* it; pour off the water and dress with butter.

A $200 Prize Offered.—*Frank Leslie's Weekly*, ever enterprising, offers $200 to the subscriber who guesses nearest to the plurality which the candidate for the Presidency may receive. This means the plurality of the popular vote. *Frank Leslie's Weekly* contains nearly every week great front-page cartoons, which quite equal those of its lively contemporary, the *Judge*. In illustrating the news events of the week in its highest possible artistic manner, and in giving also the latest pictures of foreign events, it fills a want that no other weekly in the country does. *Frank Leslie's* will be sent for five weeks for 50 cents. This includes the privilege or guessing on the plurality.

Shipping Honey to a distant market should never be done if you can possibly find sale for it at home at a good price. Use all possible means to educate those about you as to the value of honey as a food and medicine. In this way more satisfactory prices are generally obtained, and you have the satisfaction in knowing those about you are enjoying one of the best sweets on earth, for no sweet is more enjoyable than nice honey.

Mr. H. P. Landon, of New York, has perhaps "the largest house-apiary in the world." It is 11x100 feet, and holds 200 colonies. Mr. L. says, "It is a perfect success."

When You Need a friend don't pick out the man whose dog never wants to follow him.—*Ram's Horn.*

REV. W. K. MARSHALL, D. D.

Rev. W. K. Marshall was born in Indiana County, Pa., on July 19, 1808. So on July 19, 1892, he was 84 years old. He is still hale and hearty, and is doing full work.

He graduated at Jefferson College, in Pennsylvania, in 1835, and in 1836, entered the ministry in the Presbyterian Church, and has been actively engaged in the work of the ministry in that church up to the present time.

At an early period Dr. Marshall combined bee-keeping with his professional work. In 1839 he procured his first colony of bees, which was secured in the following way:

Bees could not then be bought, for the reason that all bee-keepers believed that if they sold their bees, they would sell their luck. An old German in the neighborhood, who had a large stock of bees, and who was a warm friend, was anxious for Dr. Marshall to get bees, and told him it was right to steal bees. When the Doctor informed him he could not steal, he said if he would leave the money on the stand where the bees stood, the bees would not find it out, and it would be all right; but it would not do to let any person see him.

So on one cold morning, Dr. Marshall, with his wagon, took 2 colonies of bees, and left a five-dollar gold-piece in the place.

At an early period he conceived the idea of an improved hive. He first made a hive in two parts, with slats between them, hoping in this he could divide the bees, and make two hives.

He next made a hive with bars on top 1¼ inches wide, and attached comb starters to them. He was astonished when he saw the Langstroth frame, that he did not see the necessity of end and bottom pieces.

Dr. Marshall came to Texas in 1854, and in 1855 started an apiary of some 20 colonies. In 1865 he first began to use the Langstroth hive, and in 1866 procured the first Italian queen, and

REV. W. K. MARSHALL, D. D.

probably the first that was brought to Texas.

With the movable frames, the Italian bee, and with his own discoveries, and those of others, he commenced progressive bee-keeping. At one time his apiary run up to 350 colonies, and he secured, one year, 20 tons of honey.

Dr. Marshall took the AMERCIAN BEE JOURNAL when first published at Washington, D. C., and, as he supposes, the first, and at that time the only bee-paper published in the United States. He has written largely on bee-culture, for the home papers, and has been an active member of the Texas State Bee-Keepers' Association.

He has been a close observer, and much of his knowledge in bee-culture is the result of his own observation and experience. Though in his 84th year, he is an active worker in bee-culture, and in every other good cause.

"Foul Brood" is often the cry when brood has died from some other cause. Ernest Root has been describing some cases of dead brood that appeared in two or three colonies in their Shane yard. The cappings were perforated and sunken, and the dead larvæ was of a coffee color, but two decisive symptoms of foul brood were lacking, viz.: ropiness and the "glue-pot odor." In one case the queen died, and a cell was given. When the new queen began to lay, her brood was healthy. The other cases of the disease, or whatever it was, finally disappeared of themselves.

A bee-keeper a few miles from Medina, reported similar experiences. Mr. Root thinks that this trouble, whatever it is, has often been mistaken for the real, virulent foul brood, and perhaps been cured (?) by the use of salt, carbolic acid, or some other nostrum. That is, some such "medicine" was used, and, as the trouble disappeared, it was naturally supposed that foul brood had been cured.—*B.-K. R.*

Prof. L. H. Pammel, of the State Agricultural College at Des Moines, Iowa, has sent us a 60-page pamphlet which contains one of his interesting lectures and also two essays. The lecture is on "Pollination of Flowers," and the essays are entitled "Cross and Self Fertilization in Plants" and "The Effects of Cross-Fertilization in Plants." The lecture is profusely illustrated, and all are written in Prof. Pammel's happy style. We shall make extracts from these subjects as soon as we have room.

A Song of Long Ago.

JAMES W. RILEY.

A song of long ago.
Sing it lightly—sing it low—
Sing it softly—like the lisping of the lips we used to know
When our baby laughter spilled
From the hearts forever filled
With a music sweet as a robin ever trilled!

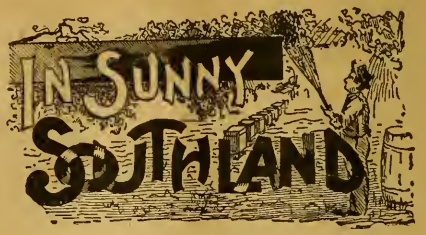
Let the sumer fragrant breeze,
And the leaves of locust trees,
And the apple buds and blossoms, and the wings of honey-bees,
All palpitate with glee,
Till the happy harmony
Brings back each childish joy to you and me.

Let the eyes of fancy turn
Where the tumbled pippins burn
Like embers in the orchard's lap of tousled grass and fern;
And let the wayward wind,
Still singing, plod behind
The cider press—the good old-fashioned kind!

Blend in the song the moan
Of the dove that grieves alone,
And the wild whirr of the locust and the bumble's drowsy drone;
And the low of cows that call
Through the pasture bars when all
The landscape fades away at evenfall.

Then, far away and clear,
Through the dusky atmosphere,
Let the wailing of the killdees be the only sound you hear.
Oh, sweet and sad and low
As the memory may know
Is the glad, pathetic song of long ago!
—Selected.

The New England Magazine for October is specially attractive for the quantity and quality of its poetry. Everett S. Hubbard contributes a fine Columbus poem, "The Three Ships," which has the place of honor in the number. Charles Edwin Markham, the Californian poet, is represented by a poem in his best vein, "A Harvest Song." Madison Cawein, of Kentucky, is somewhat metaphysical in "The Ordeal." James B. Kenyon contributes a pretty fancy, "The South Wind." St. George Best is topical with "Mars." Stuart Sterne, a New York poet, in "Vespers" and "Matins," gives us true poetry and sentiment. All these poets are of the younger generation, and are scattered throughout the Union, so that it cannot be said that the *New England* is bound by local prejudices, or closes its columns to the youger singers. And poetry is undoubtedly still read, the croakers to the contrary notwithstanding.



CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Hot in Texas.

It was 90° in the shade here yesterday and day before. Bees are booming. We are getting a good honey-flow now—Sept. 28th.

A Correction.

The second line of the first column, on page 397, should read thus: "You *see* this middle frame on her side *is*," etc., instead of the way it was printed.

A Queen-Rearing Dialogue.

(Concluded from page 428.)

I see your nuclei are tolerably strong, too. How do you keep them that way?

Well, Charles, you see I let my queens lay a frame or two of brood before shipping them, if I am not crowded too much with orders. But, if I can't do this, and I am compelled to ship as soon as they begin to lay, I bring frames of brood from other yards and keep them up, and I tell you it is a good thing to have a yard with laying queens all the time to draw brood from in this queen business.

"What do you do when you have more cells than you have nuclei to take them?"

Well, I always have a few strong, queenless colonies in some of my yards, and I draw frames of brood and bees enough from them to take all my surplus cells, which increases my number of nuclei a little every once in a while.

"I see you do not introduce virgins much."

No, I don't fool any time away introducing virgins, for I find that a virgin is nearly always a few days longer in be-

ginning to lay, than one that is not moved at all.

"Yes, but don't you lose more time when you give cells, than if you had virgins to put in?"

No. You see my nuclei are only queenless three days when I give the cell, and the cell usually hatches the next day after I put it in, so my nuclei are queenless only about 5 days, and it is best for them to be queenless awhile when we introduce virgins. So the cell will hatch out and its queen lay just about as quick as my introduced virgin; and I like it better. It is less trouble, and somehow I like the queen better, too.

"Well, I see, Mrs. Atchley, that this queen-rearing business must have some system about it to make a success of it."

Yes, Charles, every fellow must know his post of duty, like taking down a circus tent, if we wish to get a long fast. So, now, Charles, we have gone over all this "preamble," and only shown the good working side of it all. Now, to show you that it is not all sweet and no bitter, I must tell you that all the cells do not hatch, and we often lose queens in mating, and for these reasons some of our nuclei go without queens so long that they take a laying worker, and a great many other things go wrong.

But I have learned to do just like the bees do when the sun melts their combs all down, and just go to work and repair the loss as quickly as I can, and I am here to tell you that queen-breeders have their ups and downs just as much, or a little more, than honey-producers do. Now I hope I have made this all plain.

Southern Bee-Keepers, don't forget about the bee-meeting at the Dallas, Tex., Fair, on Oct. 27th. A grand time is expected.

Turning Out Brood—Retaining Drones

Here are some questions asked by Mr. C. V. Mann, of Riverton, Ill.:

1st. What is the cause of bees throwing out brood at this time of year?

2nd. Is the brood chilled or starved? If not, what ails it?

3rd. Why do bees retain their drones longer in some seasons than in others?

My bees are doing well on buckwheat, Spanish needle, heart's-ease and burr-vine.—C. V. MANN.

1st. There are several reasons for bees throwing out brood at this or other times of the year. One prominent cause is a sudden fall in temperature. So far we must give the bees credit for their instinct, that runs very close after reason. They seem to think that winter has come, and they feel they will not get honey enough to support their brood, and pull down and drag out is the order.

Another cause, here in the South, is the center or foundation moth, that makes a little webb at the base of the cells, and injures the brood, and the bees tear them out. I have noticed bees in little groups, all working hard to free themselves, but, on account of being fast by the moth-webb they could not get loose. But I think in your case it was the fall in the temperature.

2nd. I do not think that the brood is starved, only the bees seem to think, as other folks do sometimes, that they have "bitten off more than they can chew," and go to work and tear down.

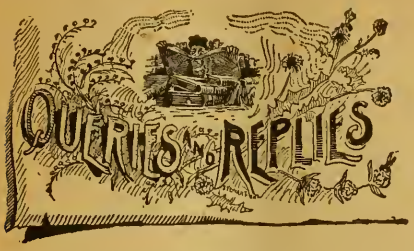
3rd. The reason your bees retain their drones longer this season, is on account of their prosperity, as you say they are getting plenty honey yet. Bees seldom kill their drones at all in this locality, so long as they gather honey, so I suppose this will hold good in your State, too; while at other times the flow of honey is cut off by some means, and drones are killed early. A cool night will cause bees to throw out brood, even if they are gathering honey, and still they will not molest the old drones.

At the Dallas Fair, in Texas, on Oct. 27th, a great bee-meeting will be held for Southern bee-keepers. Don't fail to be there.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 479, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

Read our great offer on page 453.



When Should Bees Begin to Breed in the Spring?

Query 839.—How early in the spring do you prefer to have your bees begin to rear brood?—Ark.

As soon as they leave the cellar.—C. C. MILLER.

March, in this latitude (Wisconsin).—E. FRANCE.

When willows and soft maple begin to blossom.—R. L. TAYLOR.

As soon as pollen comes in from the fields.—G. M. DOOLITTLE.

In our latitude (Georgia) the last of January.—J. P. H. BROWN.

In this latitude (western Illinois) in February.—J. M. HAMBAUGH.

About the middle of April in this latitude (Iowa).—EUGENE SECOR.

As soon as they are removed to the summer stands.—C. H. DIBBERN.

Not until there is a prospect of settled warm weather.—JAMES A. GREEN.

Not much, if any, sooner than they can have frequent flights.—JAMES HEDDON.

I prefer to have them begin in the winter; not wait until spring.—A. B. MASON.

With a location for an early honey-flow, the earlier the better.—MRS. J. N. HEATER.

By the first of March. I often have two frames of brood in February (Michigan).—H. D. CUTTING.

Let them begin when they see fit. They know better than we do, when to begin.—DADANT & SON.

About the time natural pollen begins to appear, or about Jan. 20th to Feb. 1st in this locality (Texas).—MRS. JENNIE ATCHLEY.

The bees are the best judges of the time. Keep your bees strong, give them food if they are short of stores, and leave the rest to them.—MRS. L. HARRISON.

Just as soon as the weather and conditions induce them to rear brood. If my bees have plenty of stores they never make any mistakes along this line (Kentucky).—G. W. DEMAREE.

That would depend upon climate and circumstances. I would not care to have them breed before the spring is sufficiently advanced for them to have frequent flights.—M. MAHIN.

As soon as the pollen is in the flowers. In some seasons this is too early. On the average, I find bees should be out and rearing brood as soon as they can begin to collect.—A. J. COOK.

As early as they will, which is usually in a small way from the 1st to the 15th of February, and on a larger scale from the middle of March on; depending upon how much food they have, and the protection given.—G. L. TINKER.

Just as soon as they choose—their instinct is, to my mind, a better guide than any rule that can be laid down. No one can foretell in regard to bitter cold days in early spring, so I keep colonies confined to the combs they can cover, and let them "go it alone."—J. E. POND.

"Judge."—The *Omaha Bee*, in speaking of *Judge*, says that it did fair work in 1888, but that in this campaign it is outdoing itself. *Judge* was never making such great hits as it is this year; it is leaving all its rivals behind. Such great pictures as the "Cleveland Parachute," and the bursting of the Peck boom, are memorable in campaign cartooning. But *Judge* has some great pictures in store, and the five papers for the next five weeks of the campaign will be sent for 50 cents. Address, The Judge Publishing Co., 110 Fifth Avenue, New York City.

There's Not a Young Person but what can secure at least *one* new subscriber to the BEE JOURNAL, and get the splendid Premium offered on page 453. Try it.

Report of the Iowa State Bee-Keepers' Convention.

Written for the American Bee Journal

BY J. W. BITTENBENDER.

The 10th annnal convention of the Iowa State Bee-Keepers' Convention met on the Fair Ground at Des Moines, with the President, Secretary, and Treasurer, and a very good attendance of the members. All were enthusiastic, and bee-subjects were discussed with much interest.

The bee-keepers reported a fair crop of white honey, mostly comb, with the most sale of comb honey at 15 cents per pound, and extracted at 10 cents; with a few sales at 12½ cents. Some localities reported some fall honey gathered. Bees are in good condition for winter, and the prospects are fine for a good honey crop in 1893.

The programme was then taken up, it being 1:30 p.m.

After the usual preliminary business was transacted, Mr. Eugene Secor, of Forest City, delivered the following

President's Annual Address:

It is natural for bees to breed and multiply. The Creator implanted this propensity in every living thing, and of course bees are no exception. In order to fulfill this law it is necessary for them to provide food to last through the winter. In their wild state it was not difficult to meet these two requirements. From the abundance of wild flowers, and with the instinct of industry implanted, they could easily store not only a sufficient amount of honey to winter upon, in the mild climate of which they were natives, but often a surplus.

To succeed in bee-keeping it is necessary to understand these instincts in the bees, and control them to our own advantage and profit. The propensity to increase is so strong that if left to themselves they are inclined to increase inordinately, and at the expense of surplus honey. If controlled and guided by a master hand, they will often store several hundred pounds per colony.

It will be readily understood, then, that intelligence and skill are necessary to make bee-keeping pay. You old bee-keepers understand this. If none but skilled workmen were present, it would not be necessary to call attention to first principles.

THINGS BEE-KEEPERS SHOULD KNOW.

Just as the farmer should understand the nature of his soil, and the crops best adapted to it, so the bee-keeper should thoroughly comprehend the most important principles of his art, and by observation and experience learn to apply them. There is ample scope for use of his best judgment and highest skill. He should undersand the flora of his locality; then the problem of how to increase the strength of his colonies before the main honey-flow appears; and how to have the least number of bees per colony when they are only consumers, will tax his best mental powers.

How to prevent excessive swarming when honey is the object sought, will require skill and executive ability. How to obtain the largest product with the least manipulation will require study and experience. What are the essential improvements in hives and apiarian implements, requires knowledge and judgment. How to get our surplus honey in the most attractive form for market is a thing that comes not by intuition, but by observation and study. How, when and where to market our product is worthy of our best thought.

Knowing that bees are natives of a warmer climate than this, it should be our endeavor to give them such care and protection as is needed for their safe wintering, and our own future profits. Therefore, the whole range of intricate and important questions is presented to every one who would prosecute the industry of bee-keeping to a successful issue.

A MUTUAL INTERCHANGE OF IDEAS.

We are met here for the purpose of mutual help. No one knows all there is worth knowing on any subject. Knowledge gained from the experience of any intelligent and observing bee-keeper may be of value to the fraternity, and should be freely given for the benefit of the pursuit. The only way the industry of bee-keeping can be made to assume its proper place among the rural occupations, is for bee-keepers to develop the art through mutual suggestion and

criticism, and then by united front and organized effort it will receive the recognition it deserves.

There are enough bee-keepers in Iowa to accomplish everything we desire, if united.

FOUL BROOD AND HONEY ADULTERATION.

Happily for us there is not much legislation needed in our interest. So far we have been comparatively free from the scourge of foul brood, but if that disease should get a foot-hold we might feel the need of the proper legislative authority for stamping it out.

We have no statute in this State to prevent or punish the adulterators of honey. I have no evidence that this fraud is practiced here, but if mixed in any of the cities outside of our borders, I have no doubt the producers of pure honey, as well as every consumer of the adulterated article, are injured and cheated. We ought to have a pure food law that would include honey.

MOST DESIRABLE POUND PACKAGE.

One of the things I should like to hear discussed is the most desirable pound package for comb honey. I believe the conviction is growing among the largest honey-producers and commission men that the one most in use is not the best for our purpose. This matter was discussed at our last National Convention. A package was exhibited which was perhaps 4½x6x1½ inches, which was very attractive. The additional surface adds to its appearance. I have a notion, too, that the thin combs are finished and capped sooner than one two inches in thickness. I should like to hear from some of our large honey-producers on this subject.

APIARIAN EXHIBIT AT THE WORLD'S FAIR.

The Columbian Exhibition will claim our attention in 1893. It is probable that there will be no State Fair next year. It is hoped that the bee-keepers of Iowa will do their part towards showing the honey resources of the State, and the progress being made in the art. The amount of honey expected from any individual producer will not tax his patriotism or his purse to any great extent. In all probability arrangements will be made to transport all exhibits of this character without cost to the exhibitor. It is to be hoped that exhibitors of honey and implements from Iowa will prepare two lots—one to be shown in the Government building, where all the States can exhibit together, and the other in the Iowa building, where only Iowa products are shown.

ADVANTAGE OF COMPARING NOTES.

If the past two or three seasons have not been as profitable as we could wish, it is all the more important that we should compare notes with those who have learned to reap success where we have found only failure. If our bee-keeping experience has been too much along the line of the old methods in vogue when it was thought to be all luck, we should learn of our more progressive neighbors that in bee-keeping, as in every other business, it pays to think, and then to act.

That this convention will prove a stimulous to our activities, and the means of unifying the bee-keepers of Iowa, is the wish and prayer of your presiding officer.

EUGENE SECOR.

Following the President's address, was an essay by Mr. Frank Coverdale, of Welton, entitled,

Benefit of Bees to Agriculture.

In treating this subject I will attempt only to point out a few good traits of the honey-bee beneficial to the agriculturist.

On fine days the bees are continually on the hunt for honey, pollen and wax. This is not necessary only that they might exist and have their being, but that the bees might do the work that was intended for them upon the stage of nature.

Let him who wishes to observe the grand workings of the honey-bee go out into the fruit orchards on a fine summer day with all in full bloom, and what a pleasant sight it is to behold. Pollen and honey laden bees—ah, yes, they are there for a purpose. Their carrying pollen-grains from one blossom to another causes a more perfect fertilization, which means more perfect fruit on each tree.

All the fruit-trees in the orchards, vines in the gardens, clovers in the meadows—yes, even the ragged bloom by the roadside, the heart's-ease in the grain-field, asters by the brooklet—all open with all their grandest beauty and invite the bees to come to the feast; and while they are yet at the feast, pollen—the fertilizing dust—is showered all over them, changing not at all from one kind of blossom to another; and while gathering nectar, they do not avoid carrying pollen to every blossom that they visit.

Will a man invite the intruder, or the stranger, to reach his hand into his pocket, and take out the gold and silver without ever expecting anything in return? No; this would be folly, and not in the least in nature's way. Will the flowers of the field yield up their richest all, for naught?

All of the clovers, which we are so largely dependent upon for the restoration of fertility to the soils of the great corn belt, are almost absolutely dependent upon the bee-family for their existence. Wind will not properly distribute the fertilizing dust, hence the work must be done by bees.

The apple and plum families are much better served by wind; however wind does not blow every day, and on such days bees will work most rapidly. Thus a continual fertilization is carried on until the bloom has faded.

Ah, no; the benefit of the honey-bee to the agriculturist is not generally known. Among the clovers is where her greatest work is done. In sunny June her hum will be heard in the pasture field, gathering honey from white clover, giving it such a perfect fertilization that it is always filled with seed; this seed falls to the ground in great quantities, and, during the following season, grows large quantities of feed for live stock, thus furnishing beef for the hungry, and fertility to the soil. Alsike clover, which promises to become a part of the pasture and hay fields of Iowa, yields seed to perfection because of the honey-bee.

Just as white clover ceases to bloom, the bee of the hive (with a few bumble-bees) will, as a rule, be found on red clover; hence, at this date, the above begins to fill with seed, and continues to do so until frost shuts them off; and if the grasshopper doesn't destroy the bloom, or the clover-seed midge do her work, a good supply of seed will be the certain result. Much clover seed means cheap seed; cheap seed means cheap fertility to the soil; cheap fertility means riches for the farmer; and riches for the farmer means prosperity for the city. Let the agriculturist take good care of the bees, for their agency is of great importance, not only in their assistance in fructifying the earth, but for the production of a most delicious and health-giving food for humanity.

FRANK COVERDALE.

Mr. Coverdale's essay was then discussed as follows:

Mr. Fultz said he did not think that bees were of as much benefit to fruit as is usually supposed, as he raised fruit in the State before many bees were in the country.

Mr. Clute said that he found wild bees in 1850, and also that bees are essential to fertilize fruit-bloom. He found fruit more perfect as bees increased in numbers.

Mr. Kimball had learned by personal experience that bees were very beneficial to the fruit-growers.

Mr. Coverdale—Is there a variety of clover that bees cannot gather honey from? When they desire, I have known bees to gather honey from red clover, when grasshoppers cut the corollas.

Mr. M. M. Hamilton, of Clearfield, then read an essay as follows, entitled,

My System of Wintering Bees.

I have been requested to give my plan of wintering bees. When I first turned my attention to bee-keeping, the wintering of bees was what bothered me most. I read books on the subject, and inquired of those who were keeping bees in this section of country, and the information gained was so varied that I was at a loss to know which method to adopt.

Some wintered their bees on the summer stands, and saved all the colonies, while others lost part, or all of theirs; some wintered their bees on the summer stands, and placed a box over the entire hive, leaving an entrance for the bees, packing hay around the sides and over the top, and then covering the whole with long slough-grass. This last plan proves very successful, but is very inconvenient for examining the bees (which, I think, is very necessary to wintering), and is more expensive than my method, which is this:

I use the summer stand, which is made of two pieces six inches high and about 16 inches long, with strips nailed from one to the other for the hive to rest on. I first pick out as dry a place as possible, sheltered on the north, and build a shed high enough to admit the hive with the super on, about 4½ feet wide, and long enough to admit all the colonies.

I place the first colony about 10 inches from the end, and 10 inches from the back, packing with prairie hay. I then place another colony about 10 inches from the first, and pack the same as the first, and so on until I have them all packed away. I then place an absorbing cushion in the super, and the bees are ready for the cold weather.

I spread hay or straw in front of the hives, so that on fine days, when the bees come out for a flight, if they should fall before they get to the hive, they do not get chilled on the cold ground.

I have examined the bees after a cold spell, and would find the top of the cushion covered with frost. I would prop the cover up, and let the sun shine in on the cushion, and dry it, then turn it over, shut the cover down, and the bees were ready for another cold spell.

This plan is very convenient about feeding, as it is easy to get to the bees, and has proved an entire success with me in wintering bees.

The first winter I put away 14 colonies, and did not lose any until spring, then I lost three for want of food. The next winter I put away 23, and saved all of them. I lost one the latter part of May, owing to the rainy weather and neglect of feeding; also one colony in June from robbers. The balance came through the long, cold, rainy weather in very good condition.

Some have tried the above plan, and have had good results. Some have tried other plans, such as putting the hives on boards on the ground, and covering with hay, not putting cushions on, and lost about one-third of their bees. Others have tried putting them in a close shed, with no way to get out, and they lost nearly all of their bees.

I feel that for this section of country my plan is the best, as it has proven so for the past two winters. But it might not do for more northern localities, where the winters are more severe.

M. M. HAMILTON.

The discussion on the subject of Mr. Hamilton's essay was as follows:

Mr. Fultz has wintered his bees in chaff hives successfully for the past ten years.

Mr. Coverdale winters his bees both in-doors and out-doors with small per cent. of loss. To winter bees well, they must have good food, and be well packed.

Mr. Lent winters his bees on the summer stands with packing around them.

Mr. Hudson winters his bees on the summer stands, and ventilates the hives on warm days.

Mr. Secor said we want a method of wintering that is good and cheap.

Mr. Fultz said that bee-men lose more bees by spring dwindling than by wintering.

A member asked the per cent. of loss. He wintered his bees in the cellar, having put in 59 colonies, and took out 35 alive; they dwindled down to 21.

Mr. Kimball said that a colony poorly prepared for winter will come out poorly in the spring, and will suffer much from dwindling. A colony with new comb, and with little or no pollen, winters best.

Mr. Fultz thinks that the cause of spring dwindling principally originates by putting the bees out too early in the spring.

Mr. Coverdale advised packing bees well with three inches of packing all around, and six inches of chaff on top. He said that every one should study his own locality, and learn how to prepare the bees in accordance with the circumstances of the several localities.

The convention then had the pleasure of listening to a very interesting speech by the Secretary of the Iowa Columbian Commission—Mr. F. N. Chase, of Cedar Falls, who strongly impressed the duty upon Iowa bee-keepers of preparing a honey exhibit for both the Exposition building and the Iowa building. He showed how important it was, and that it would afford much pleasure and comfort to make such an exhibit.

In regard to expenses, the commissioners would receive all honey and pay all expenses; but that as yet there has not been any appropriation made by the commissioners to defray expenses, and perhaps will not be until the Iowa bee-keepers have stated what honey will be offered for exhibition. No one exhibitor is entitled to exhibit, in the World's Fair building, more than 100 pounds of comb honey, and 50 pounds of extracted. But in the Iowa building it is not limited.

All Iowa bee-keepers that have any honey which they contemplate exhibiting at the World's Fair, should let it be known by addressing the Secretary of the Iowa State Bee-Keepers' Association, J. W. Bittenbender, of Knoxville, Iowa.

The convention then adjourned until the following day—Aug. 31.

J. W. BITTENBENDER, *Sec.*

(Concluded next week.)

Every Boy and Girl will be interested in reading page 453 of this issue of the BEE JOURNAL. And we shouldn't wonder if the older folks, also, would be much pleased. We offer the BEE JOURNAL from now to Jan. 1, 1894, for $1.00, to a new subscriber, and give the "World's Fair Combined Games and Puzzles" as premium for getting such new subscriber. Or, we club it with the BEE JOURNAL for one year, for $1.20.

Outside Indications that Bees are Getting Honey.

Written for the American Bee Journal

BY G. M. DOOLITTLE.

A correspondent writes, "How can I tell when my bees are gathering honey without opening the hives? When bees are busy going and coming from the hive, and we see no pollen on their pollen baskets, does it indicate that they are getting honey? Please answer through the AMERICAN BEE JOURNAL, as I am taking that paper, and like it very much."

Bees may be flying very briskly, and yet not be securing any honey from the fields. When young bees come out for the first time to take an airing, a casual observer might think they were at work very busily, while the truth would be that they were doing nothing but play.

These young bees have deceived very many in times of scarcity of honey, in being taken for robbers, for in actions they behave very much as robbers do in heading toward the hive and circling away from it, and also in being full to look at. I have often watched them, asking myself the question, "How can they be distinguished from robbers by the inexperienced?" and must say that only in looks do they appear differently, they being light colored and covered with down, while robber-bees are generally old, dark-colored bees with the down scraped off. The actions of the two are very similar.

Again, in the summer season, when a large quantity of brood is being reared, I have often thought that the bees were getting honey quite rapidly, immediately after a long-continued rain, and wondered at it; but an examination showed that they were loaded only with water, which is required in large quantities when brood-rearing is going on rapidly.

Once more: Bees often fly briskly when neither honey nor pollen is being gathered, especially in the spring of the year. At this season they will fly out every pleasant day, marking their location, etc., and getting ready for the time when there is something which can be gathered. Bees which are securing honey do not fly as easily on their return as do bees when not at work, but come down on the alighting-board with a kind of dropping motion that at once shows that the bee has a load of something. Then the sound of the wings is different, for the motion is slower, and gives only a tired hum, instead of a sharp sound, as is given by angry bees.

In times of basswood, when there is a large yield, the bees will start out in early morning, and come home loaded so heavy that they will fall short of the hive several feet, and often fall all around in the grass and on top of the hives, being unable to rise for sometime. As the day advances they do not show this so much; but as night comes on, they begin to fall as before, some even staying out over night, darkness overtaking them before they reach home. In such times as this it is easy for anyone to tell that the bees are getting honey.

In times of clover and other flowers, when the yield is not so great, if you will get your eye on a level with the alighting-board, it is quite easy to detect a loaded bee, even though the load may be light, from one that has no load. Such loaded bees hold the abdomen lower down than bees with no load, so that the abdomen strikes the board as soon as the feet do, while with a heavy load it strikes first, often causing the bee to bound up, as it were, and sometimes tumble over entirely. Many an hour have I watched the bees in this way, to see what could be told from outside appearances.

But so far I have given nothing definite, only as the increase of honey in the hive kept pace with the signs from without, which point to the above being right. How did I tell for certain that these outside appearances were correct? Well, if you will catch a bee and dissect it, you can know for a certainty what it has in its honey-stomach, and this is the way I tell, if I am not sure I am right from outside appearances.

As the bee drops on the alighting-board, with a quick motion put the finger on the thorax, bearing down until the thorax gives way, which will kill the bee at once, and do it quicker than any other way I have seen tried—even quicker than the "painless death," as

the scientists suppose, which they practice in killing their specimens for scientific research.

Having killed the bee, pick it up by the wings, when you will take it by the thorax with the left hand, and with the point of the blade of your jack-nife pull off the horny scales of the abdomen by slipping it under them and placing the thumb above. When the honey-sac is secured, it is easy to tell what it contains, by the taste.

Don't undertand that I go around killing and dissecting bees all the time during the summer months in this way, for only five or six are killed in a season to guide me in my observations, for I always think it is very cruel to kill anything, only as something of importance is to be gained.

From the above I think the correspondent, or any one, can tell when the bees are at work, and when they are at play. All should practice these outside observations, along the many lines that are offered us, for often by them we can learn when and what needs doing; when different plants are in bloom, etc.

When we see brood outside on the alighting-board, we know that bees are troubled with moth-worms, or are starving, in which case they need our assistance. When we see many round cappings on the alighting-board, we can know that drones are hatching; or, if only one or two, and these thick and dark colored, we can know that young queens are hatching.

If the bees are entering the hive covered with yellow dust, we can know that they are working on selandine or pumpkin; and, if a white dust, then on teasel, in this locality. And so, by observation and practice, the bee-keeper can take in many things at a glance.

Borodino, N. Y.

Apiarian Display and Premiums at St. Joseph, Mo., Fair.

Written for the American Bee Journal

BY REV. E. T. ABBOTT.

The Fair closed on Saturday, Sept. 17th, very auspiciously. The weather throughout the week was all that could be asked, and the crowd was immense—56,000 people went through the gates on Thursday.

The display in the apiarian department was in every way creditable, considering the season, and was a success. The premiums were liberal, and the Association paid the exhibitors in this department about $300 in premiums.

There were two attractive displays of comb honey. Messrs. Kimball & Large, of De Witt, Iowa, were awarded the first premium, and Miss Mary Poteet, of St. Joseph, the second.

There were three displays of extracted honey, all of which were neatly arranged and attracted much attention. Kimball & Large carried off the first, and the St. Joseph Apiary Co. the second prize.

There were two displays of apicultural literature, the St. Joseph Apiary Co. received the first, and Miss Poteet the second premium.

The St. Joseph Apiary Co. took first on the best display of apiarian implements, and Kimball & Large the second.

There were three entries for the best crate of 500 sections, but owing to an error in entering them, one was ruled out. G. B. Lewis & Co. received first prize, and A. I. Root second.

There were four entries for the best all-purpose hive—the Root dovetailed hive, a dovetailed chaff-hive, the improved Langstroth Simplicity, and the "St. Joe" hive. The first premium was awarded to the St. Joseph Apiary Co. on their "St. Joe" hive, and the second to Kimball & Large, on a dovetailed chaff-hive.

There were a number of entries on bees, queens, comb foundation, section presses, smokers, etc., all of which were awarded liberal premiums.

The Fair, as a whole, was a success, and the Fair Board deserve the thanks of the bee-keepers for the liberal encouragement they gave this industry. This was the first Fair for most of the Board, and some things did not work very smoothly at the opening, but it is to be hoped that they have learned by experience, and that next year all of this friction will be avoided.

Long live the apiarian department of the St. Joseph Fair Association!

St. Joseph, Mo.

What Variety of Buckwheat is Best for Honey?

Written for the American Bee Journal

BY D. J. JOHNSON.

What kinds of buckwheat yield the most honey? is a question well worth considering for bee-keepers. I believe the favor is with the Japanese for yielding the most honey. I have experimented four years in succession with four kinds,

and find that the bees work a great deal more on the marblehead, Australian and silverhull than they do on the Japanese variety, in my locality, but the latter yields one-third more bushels of seed per acre than do the other three varieties. The Japanese ripens ten days earlier than the marblehead and Australian when sown on the same date. The other kinds bloom longer, and afford pasture longer, and while the four vareties are in bloom at the same time, there are generally ten bees on the marblehead, Australian and silverhull kinds, to one on the Japanese variety. I would like to hear from other bee-keepers as to what their experience has been with the varieties of buckwheat; and whether localities have anything to do with it, like some other honey-plants. I have kept bees for at least 23 years, and buckwheat helped me out more than one year that I would have had to feed if it had not been for this valuable honey-plant.

My surplus this season was 45 pounds of comb honey per colony, spring count, which I sold at 15 to 18 cents per pound.

Summit Mills, Pa., Sept. 26, 1892.

My Experience in Bee-Keeping in Louisiana.

Written for the American Bee Journal

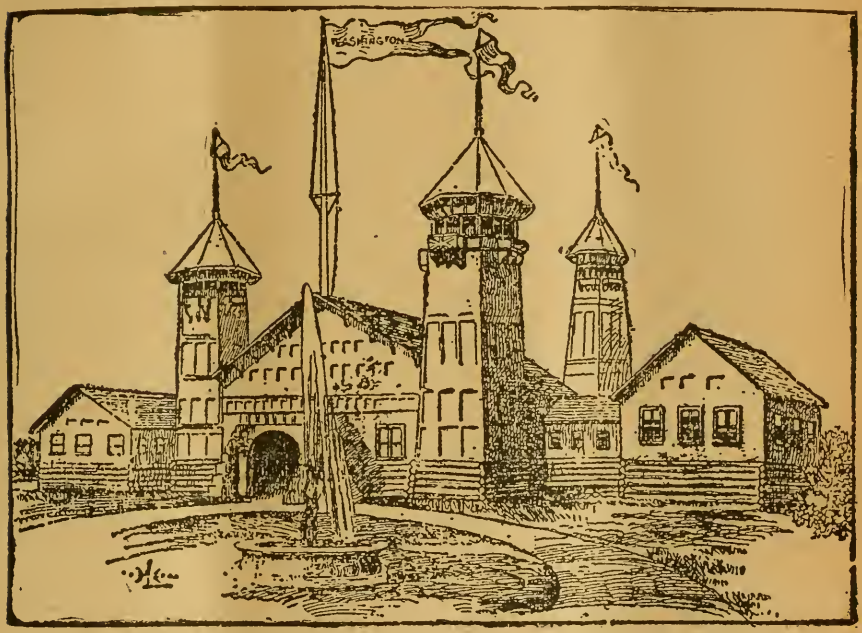
BY P. E. COUVILLON.

Five years ago I captured a colony of black bees in my orchard, in a wooden half-barrel. The year after I got three more, making four. I made box-hives, and the third year I got more colonies, making nine. Last year I had 13, which I got Mr. S. R. Wallace, a neighbor, to help transfer to 10-frame Langstroth-Simplicity hives.

Mr. Wallace is well identified in bee-culture. He sold me four Italian queens, which were successfully introduced.

I lost, last winter, 2 colonies by moths, and last spring I started with 11 good, strong colonies in single hives. I have to-day 22 colonies in double hives, and 12 in single hives. I bought more Italian bees last May, and now I have nearly all pure Italian bees.

I extracted, on June 8th, 30 gallons of honey; then the rainy season set in, and for 57 days we had daily rains, and



Washington State Building at the World's Columbian Exposition, in 1893.

my bees gathered no surplus honey. Now, during the past four or five weeks of good weather, they gathered a great deal of honey, and I am extracting 4 gallons of honey from each top of my double hives, well capped from the top to the bottom of the frames.

I shipped a barrel of honey this morning, and expect to have another one ready in a few days. I did not extract from the single hives, as their bees have been hived only since last month, and 3 of them this month.

I am succeeding very well in rearing pure Italian queens, and I have only 3 more colonies of hybrids, which is very good.

I have three brothers who commenced last year, and have, between them, 26 colonies in Langstroth hives, some black, and some Italian bees, making all together 60 colonies among the four of us.

I keep my apiary clean. My hives are all painted, and rest on scantlings in one straight row, under fruit-trees three feet apart. They are near my store, and they seem to be more gentle than bees away a certain distance from the house.

My bees are not troubled now with moths, the yard being clear of grass, and I raise a good many chickens, which, I believe, help to destroy the moth-millers.

I am rather a novice at the bee-business, but as you see, I am doing well, I think. I ought to have, in a year from this date, 80 or 90 colonies all in double hives, if no bad luck occurs. I leave them on the summer stands all winter.

Carencro, La., Sept. 12, 1892.

Some Valuable Honey-Plants of Kansas.

Written for the American Bee Journal

BY PROF. C. L. STRICKLAND.

I wonder how many readers of the good AMERICAN BEE JOURNAL know that "malsemoney" (*Lycium-Sulgari*) is a wonderful honey-producing plant, or vine, and may be trained to assume a beautiful form as a hedge or garden fence. But the way to prepare it as follows:

Take pieces of the roots, and after plowing and harrowing the ground, make rows 4 feet apart, and as land in some places is cheap, put in an out-of-the-way corner, and tend as you would corn. Train it in rows 3 feet wide, by 3 or 4 tall. Keep clean, and I verily believe that an acre will produce more honey than 80 acres of any other honey-plant known to us.

The bloom is of a purple color and is also continuous, and the drops are of large size, but whether it would flourish in all the States or not I could not tell.

Ground once used or occupied by this plant can never be used for anything else, as the smallest root will start a vine at once when disturbed.

This plant is solely for honey and fancy hedges. It begins to bloom and produce honey here about May first, and continues in constant bloom until killed by frost in October. The main vine is strong, and will stand 40° below zero. Cold or wet, hot or dry, appears to make no impression upon it.

ALFALFA FOR HAY AND HONEY.

Next comes the great alfalfa. This plant, upon land, properly prepared, will produce a fine crop of hay the second year, and also will give a good run of nectar. It commences to bloom about June 1st, and continues at a high rate for 2 or 3 weeks, giving a honey of a delicious quality and as clear as "Silver Drip." This plant is the king on account of its meritorious qualities, and honey as a free gift.

Bees are strong here. We have had part of our fall honey-flow from weeds. One more good rain would give us another boom, if not too late.

Last spring was "rough" on the little bee. I fed up to June 7th, when alfalfa came to my relief. And thus we pass on, in paths of apiculture, "up hill and down."

Peabody, Kans., Sept. 18, 1892.

The Baron Berlepsch, in several different experiments made to find out how many eggs are daily deposited by the queen-bee, discovered that she laid 1,604 eggs in 24 hours, as the result of the first. In the second, she deposited, on an average, 1,913 daily for the space of 20 days. In the third one, an average of 2,400 daily was found for the same length of time. In the fourth she deposited 3,021 in 24 hours. She was seen by him to deposit six in one minute.

Later experiments with two and three story hives go to prove that the queen actually lays as many as 5,000 eggs during every 24 hours for a period of a week or so.—*Selected.*

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Uniting Nuclei by Feeding.

As it is time to unite colonies for winter, I want to tell how I unite my nuclei.

I place a super on the nucleus which I want to build up, fill a feeder with honey, and if I have not a feeder I take any shallow dish ; put in the food some pieces of wood for floats, and set on the frames in the super. I shake the bees, that I want to unite, in front of this hive, smoking them as they run in. I also smoke the ones in the hive. Their fighting propensities become so absorbed in the sweetness of what is in the feeder, that all are in peace and tranquility. I never have lost any bees when I united by feeding. WM. H. BRIGHT.

Mazeppa, Minn., Sept. 27, 1892.

Experience with Blacks and Italians.

I started in bee-keeping the spring of 1891, having bought my bees, which were all blacks. One of my neighbors concluded that he would transfer one of the colonies, and in the transfer he killed the queen ; he then told me that if I would introduce a queen we would be "halvers." So I bought an Italian queen and put her in all right. They were very weak in the fall, and on April 1st, 1892, there was about one pint of workers, and the mother-bee in the hive. They went to breeding, and I began feeding, and that Italian queen, this year, has laid the eggs for three good colonies of bees, while my blacks have only kept in good working order.

My Italians got rich off the sour-wood in July, and cast a swarm, while the blacks did nothing to compare with them. We all know the good qualities of the Italians, how they will defend their stores, keep out moths, etc., and concerning robbing. I have just been out among the bees, and robbers are numerous, but not an Italian can I see —they are mostly blacks, some with a light dash of Italian blood. But the Italians, when they see that stores are to be had easily, and others are at robbing, and some colony has given up to be robbed—the Italians are like the old saying, "Jennie put the kettle on, and we'll all take tea."

With the experience I have with the Italians, I would say they are as far ahead of the black bees as the Berkshire hogs are ahead of the old bristle-backed rangers.

Nearly all intelligent bee-men say that the Italians are the superior race of bees so far. My Italians are now at work, while the blacks are lounging around. WM. WEBB.

Sutton, Tenn., Sept. 15, 1892.

Bees in Good Condition.

Bees are in good condition. They have stored from one to three gallons per colony here this summer, from June to the present time. H. C. AHLERS.

New Orleans, La., Sept. 22, 1892.

Doing Well on Golden-Rod.

The bees are doing well on the golden-rod. We have had some heavy frosts, but that does not hurt the golden-rod. I will give this week's work of the bees : Sept 12th, 8½ pounds ; 13th, 0 ; 14th, 4 pounds ; 15th, 4½ : 16th, 5 ; 17th, 3 ; 18th, 11½. Total, 36½ pounds.

When I got home from church to-day, I had a big swarm of bees clustered on top of a hive. I have stones on top of the hives to weight the covers down, and the bees were clustered on the stone. I have had 5 swarms to come out this year, and they have all clustered on top of other hives, and around the stones on top. I take an empty hive in one hand, the smoker in the other, and smoke them a little, and they walk right in. GEO. W. NANCE.

Peiro, Iowa, Sept. 18, 1892.

Best Season for Several Years.

I want to say that the best season for honey for several years in this part of the country, is now just closing—a continual flow since clover bloom. Seven colonies have filled to completion 525 one-pound sections, one of which colonies completed 120 of the above. I shipped 3 cases of 72 sections a week

ago to St. Louis, which sold for 16 cents per section! At home I get 12½ cents per section; next week I will raise the price to 15 cents per section.

I have kept one colony building comb and storing honey in Langstroth frames to feed with next spring, and have secured 24 of the same with sealed honey. My bees swarmed once during the summer—June 18. I provided plenty of room and shade by planting butter-beans for that purpose. Bees are booming on golden-rod, asters, etc. now. D. A. CADWALLADER.

Prairie du Rocher, Ills., Sept. 26.

Poor Season for Bees.

I had 47 colonies, spring count, and extracted 275 pounds of honey, 112 pounds of comb honey, and had 33 swarms, but the most of them went back to the old hives in a few minutes; sometimes a part would go back, and just a few remain in the new hive. There is not more than one-fourth of the new swarms that gathered enough to winter on, but all of the old ones are in good condition for winter.

I attend to most of the bees within five miles of me, and find that none of them have done any better than my own. I cannot see that my bees have stored anything since July 20th. There is more golden-rod here this season than I ever saw before, but the bees pass it by. I extracted a few pounds some days ago, but it looked more like New Orleans molasses than like honey. Extracted honey is worth 10 cents a pound, and comb honey 15 cents, here.

C. C. ZINN.

New Windsor, Colo., Sept. 26, 1892.

Bee Journal Posters, printed in two colors, will be mailed free upon application. They may be used to advantage at Fairs over Bee and Honey Exhibits. We will send sample copies of the BEE JOURNAL to be used in connection with the Posters in securing subscribers. Write a week before the Fair, telling us where to send them. We would like to have a good agent at every Fair to be held this year. Here is a chance for a live man—or woman.

The Globe Bee-Veil, which we offer on page 476 of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, at $1.00 each.

Keeping Comb Honey.

A question:—"Where and how can I keep honey after it is taken out of the hive? Last summer I took some out about August 1st, and put it into a room upstairs. There were a few old combs, flour and other stuff in the room. In three or four weeks after, there were a lot of little butterflies and worms all over the honey."

ANS.—The above correspondent raises an important question in keeping comb honey, and we reply by cautioning against allowing old combs in any place where section honey is stored. All old or waste comb should be rendered into wax, and never be allowed around where bees are kept, as it is sure to be a nursery for the bee-moth in warm weather.

When comb honey is infested with moths it can be cleared by setting the cases or sections in a large box or other tight room, then burning some sulphur in an iron kettle, covering all up tightly, and using great care to not set the box or house on fire.

When moths infest our comb honey, as they have sometimes done, we set the cases tightly on top of each other and then burn sulphur on top in an empty hive body. Two pounds of stick-brimstone, burned in a tight room 12 feet square, will destroy all animal life in it. —*Selected.*

Alcohol on the Brain.

"I was present at an autopsy of a noted old 'rounder' of my town a few weeks ago," said John A. Holliday, of Troy, N. Y., to a St. Louis *Globe* reporter, "and I was startled and shocked at what I saw. The dead man was about sixty years old and had been the town drunkard for forty years. The doctors had surmised that when they cut his head open a pronounced smell of alcohol would issue from the skull.

"I thought it only one of those grim sort of jokes that the Æsculapians in-

dulge in sometimes when they are carving a fellow-man to mince-meat in the interest of their science. But I soon learned that it was no joke, for when the surgeon's saw had cut off the top of the man's skull the odor of the alcohol that filled the room was strong enough to almost sicken one. Then one of the surgeons struck a match and held it close to the brain. Immediately a blue flame enveloped the entire portion of the cerebral organ exposed, and the quivering flesh sizzled as if on a gridiron.

"That experiment and disclosure set me to very seriously thinking about the error of my way. I am not a temperance lecturer nor a prohibition politician, but I most respectfully and firmly decline your invitation to have something. I don't want my brain to float around in a sea of alcohol, as did that of the poor old town drunkard of Troy. There is no telling how many other men's brains will reveal the same condition, if an autopsy is held upon them."—*N. Y. Witness.*

Value of Alsike Clover.

The farmers here (Wisconsin), are beginning to grow Alsike quite extensively. Those who have grown it speak well of it. They think it makes the best of hay, both for cows and sheep, and that it is very profitable when grown for its seed. One farmer in this county has sold $300 worth of seed from 3 acres of Alsike clover in 3 years. Besides the seed, his stock—cows and sheep—have eaten every bit of the thrashed straw. He values the thrashed Alsike as highly, at least, as the unthrashed red clover.—M. M. BALDRIDGE, in *Gleanings.*

Bee-Culture for Health.

A delicate young lady on a farm took up the culture of bees as an out-door incentive, hoping thereby to build up her health. She has not only improved digestion and appetite, but established a delightful interest and study, a renumerative industry, a financial success.

Start out to cultivate thoroughly any valuable resource of mind, body or business, and you will develop a use, a service, that fits all around, and makes the world better worth living in.

When You Have any honey to sell, get some Honey Almanacs and scatter in your locality. They will sell it all in a very short time.

AMERICAN BEE JOURNAL

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TO CORRESPONDENTS.

The Bee Journal is sent to subscribers until an order is received by the publishers for its discontinuance, and all arrearages are paid.

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Emerson Binders, made especially for the AMERICAN BEE JOURNAL, are convenient for preserving each weekly Number, as fast as received. They will be sent, post-paid, for 50 cts. each. They cannot be sent by mail to Canada.

Lost Numbers.—We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails, we will replace them if notified before all the edition is exhausted.

Always State the Post-Office to which your paper is addressed, when writing to us.

Special Notices.

The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription to the *end* of next December :

Wallace Porter Dec92
Suffield, Portage co, Ohio

CLUBBING 'LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	*Club.*
The American Bee Journal	$1 00	
and Gleanings in Bee-Culture	2 00	1 75
Bee-Keepers' Review	2 00	1 75
The Apiculturist	1 75	1 65
Bee-Keepers' Guide	1 50	1 40
American Bee-Keeper	1 50	1 40
Canadian Bee Journal	2 00	1 75
Nebraska Bee-Keeper	1 50	1 35
The 8 above-named papers	6 25	5 25
and Langstroth Revised (Dadant)	2 40	2 25
Cook's Manual	2 00	1 75
Doolittle on Queen-Rearing	2 00	1 65
Bees and Honey (Newman)	2 00	1 75
Advanced Bee-Culture	1 50	1 40
Dzierzon's Bee-Book (cloth)	2 25	2 00
Root's A B C of Bee-Culture	2 25	2 10
A Year Among the Bees	1 50	1 35
Convention Hand-Book	1 25	1 15
History of National Society	1 50	1 25
Weekly Inter-Ocean	2 00	1 75
The Lever (Temperance)	2 00	1 75
Orange Judd Farmer	2 00	1 75
Farm, Field and Stockman	2 00	1 75
Prairie Farmer	2 00	1 75
Illustrated Home Journal	1 50	1 35
American Garden	2 50	2 00
Rural New Yorker	3 00	2 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Be Sure to read offer on page 453.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—To sell, good Apiary and Fixtures at Pattonsburg, Mo. Good location. Address, G. F. TUCKER,
14A4t Yellville, Ark.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

Convention Notices.

CONNECTICUT.—The fall meeting of the Connecticut Bee-Keepers' Association will be held at the Capitol at Hartford, on Thursday, Nov. 3rd, 1892. MRS. W. E. RILEY, Sec.
Waterbury, Conn.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m. on Monday, Nov. 28, 1892. All bee-keepers are invited to attend.
Friendship, N. Y. H. L. DWIGHT, Sec.

ILLINOIS.—The Illinois State Bee-Keepers Association will hold a two days' session at the Commercial Hotel in Chicago, Ills., Tuesday and Wednesday, Oct. 18th and 19th, 1892—the week of the Dedication of the World's Fair building. Reduced railroad rates will then be expected, and a large attendance of bee-keepers from the whole country.
Bradfordton, Ills. JAS. A. STONE, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected; President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

PENNSYLVANIA.—The 13th annual convention of the Northeastern Ohio, Northern Pennsylvania and Western New York Bee-Keepers' Association will be held in the parlors of the Mineral Springs Hotel at Saegerstown, Pa., on Oct. 19th, 1892, at 10 o'clock, a. m., for a two-days' session. The program will consist of practical topics, discussed by practical bee-keepers. Saegerstown is situated six miles east of Meadville, on the New York, Pennsylvania and Ohio railroad. Reduced rates to those attending the convention have been secured. Saegerstown is one of the finest summer resorts of the country. A steamer is afloat on the river, which will be at the disposal of all wishing it. Let all attend who can. Ladies are especially invited. Programs will be sent to others upon request, by the Secretary. GEORGE SPITLER, Sec.
Mosiertown, Pa.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 479.

Don't Fail to read all of page 453.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., OCTOBER 13, 1892. NO. 16.

The Man who knows it all
And keeps it, we adore;
But he who knows it all
And tells it, is a bore.

Kerosene Oil as a remedy for bee-stings is suggested in one of our exchanges. It says that "it will not swell any if applied immediately."

The Fat Stock Show, which for years has been held in November in Chicago, has been indefinitely postponed, on account of the inability of the Managers to have the proposed new building completed in time.

Golden-Rod has been selected as the flower of the new Chicago University, which opens this fall with President Wm. R. Harper at its head. By the way, it seems that the *golden*-rod is much more popular in educational circles than is the *birchen*-rod. Some of us, doubtless, have reason to remember our acquaintance with the latter in our younger days.

The Illinois State Convention which is to meet at the Commercial Hotel here in Chicago on Oct. 18th and 19th, promises to be a good one. Mr. Jas. A. Stone, its enthusiastic Secretary, makes the following explanation about the programme:

FRIEND YORK:—On account of the unavoidable delays in the mails and otherwise, we are unable to have published a programme in full of our Chicago meeting of the Illinois State Bee-Keepers' Association on Oct. 18th and 19th. Many of the most prominent bee-keepers of our land will be there. Excursion rates on all the railroads will be secured. Let every one attending load himself or herself with the questions they desire answered and discussed, and it is very certain that none will go away saying the programme was not a good one.

We expect Dr. Miller with his songs.

It is very important that a large representation of bee-keepers be there, as there will be a formal action taken, requesting the Illinois State Board of Agriculture to appropriate such an amount as will be needed for our State to make a creditable apiarian exhibit at the World's Fair. Yours truly,

JAS. A. STONE, *Sec.*

Colorado, it is said, is becoming the banner honey-district of the West. The shipments of honey from Denver this fall will aggregate fully 20 carcoads. And the industry is still in its infancy. Good for the "Centennial State."

Great Premium on page 485!

The First of the monthly bee-papers we received for October was the *American Bee-Keeper*. It is a specially bright number, and for so young a paper it gives unusual promise of great usefulness, and helpful influence to the pursuit of bee-keeping. Its publishers are wide-awake, and are quite able to sustain the standard which their periodical has attained. Regarding the season of 1892, it says this editorially:

The season of 1892 goes on record as one of the poorest for the honey-producer, the queen-breeder and the manufacturer of apiarian supplies that has been known for many years. The long, wet and cold spring resulting in the dwindling and destruction of many colonies, and retarding the brood-rearing, was followed by a generally good summer season, but so short that the bees in their weakened condition could not store any surplus to speak of, most of the honey gathered going to fill the brood-chambers. In some localities considerable surplus was stored, and bees did fairly well, but as a rule bee-keeping has been carried on at a loss this season.

The price paid for nice new comb honey is higher than last season, and the demand is in excess of the supply. In our judgment, the proper time to dispose of honey is during this and next month. Prices are apt to be stronger than later on.

Apicultural Experiments is a subject which Prof. Cook writes about very vigorously on page 498. He knows exactly what he is talking about, and bee-keepers, as well as others who read that article, will also have a better comprehension of the great importance and urgent necessity of apicultural experimentation.

Of course this work should be undertaken by the Government, and not be left to generally incompetent and often financially unable individual efforts. The various State apicultural experiment stations and colleges are the places where such work should be performed. In these institutions are to be found ample facilities and cultivated and devoted intelligence to carry on different lines of experimentation that can but result in great blessing to the bee-keeper, and in many instances would be of incalculable benefit to the country at large.

The matter of expense is not deserving of consideration, when compared with the importance of the work proposed, and its inevitable beneficent influence upon our land and nation.

We also would urge upon the various more prominent bee-conventions, to be held in the near future, the wisdom of Prof. Cook's suggestion, that they pass "vigorous resolutions," and appoint "wide-awake committees" to bring this matter of the great need of apicultural experiments before the proper authorities, both State and National, and "*push for what is just and right.*" Only by so doing is there at all any promise of either immediate or later attainment of the desired righteous object.

Any suggestions that would likely aid those who may be called upon to work for the just recognition of the rights of bee-keepers in legislatures or elsewhere, will doubtless be appreciated. Let us have your best ideas on this, as well as other subjects which touch the apiarian heart and life.

The Best Display of honey at the Arkansas valley Fair in Rocky Ford, Colo., lately was made by J. F. Hogan, who has 126 colonies in healthy condition. Mr. Hogan has a colony of pure Italian bees working in a glass globe, building comb and filling the cells with stores. This curiosity will be sent to the Columbian Exhibition next year.

Honey-Dew is not feared in Colorado. The *Field and Farm*, of Denver, says that they "may have the foul brood, but there is every reason to believe that honey-dew will never come to us, on account of the dry climate and brilliant sunshine."

Don't Fail to read all of page 485.

Mr. Geo. E. Hilton, of Fremont, Mich., is thus noticed in the Fremont *Indicator* for Sept. 29th, besides giving his portrait and a short biographical sketch:

It is quite gratifying to know that our candidate for Representative in the State Legislature was the unanimous choice of the many delegates at the convention on Sept. 21st. Such hearty unanimity is good for the head of the ticket—a high compliment for our honored townsman, and who is pretty certain to receive as large a vote as was ever cast for a candidate for representative in this (Newaygo) county.

Above all things, this country needs good officials to enforce its laws, and look after the interests of its citizens. When it comes to politics, the BEE JOURNAL isn't "in it"—to use a slang but emphatic expression; however, it would like to see always the very best men at the head of the important affairs of this country. To that extent the BEE JOURNAL *is* interested.

The Value of Membership in the National Bee-Keepers' Union is again made apparent by the following letter from one of its members who was threatened with trouble, by jealous neighbors, for keeping bees in National City, Calif. The letter was written to the General Manager of the Union, and shows how the *moral influence* of being a member of the "Union" prevented trouble, and at the same time gave "officials" an opportunity of becoming posted concerning the rights guaranteed by the Constitution of the United States to bee-keepers, while in the prosecution of their legitimate pursuit. Here is the letter:

Your letter and printed matter came to hand in due time. One copy of "the Arkansas Supreme Court Decision" is hanging in the Post-office; the City Council has one, and the city attorney (a friend of mine) was glad to become posted upon this matter, as was likewise the President of the Chamber of Commerce of San Diego county; and I have not heard a word of it since.

It was a case of "threats" so far, but I consider it a grand thing to be able to educate the people on this question, and ward off trouble, expense, and a lot of hard feelings.

I shall talk "Union" to all the beemen I meet, and hope to be able to convince some about the actual value and benefit of the National Bee-Keepers' Union, and the necessity of getting their membership. I shall attend the County Fair this week, and shall post up the Supreme Court Decision, the 7th Annual Report, and the Constitution, in a conspicuous place.

ARTHUR HANSEN.

National City, Calif., Sept. 18, 1892.

In preventing trouble, the Union is just as successful as it is when it conducts a case in Court. All bee-keepers should be proud of it, and give it their most hearty support.

The Clemons-Mason Commission Co., of Kansas City, Mo., have informed us that their place of business was destroyed by fire on Sept. 24th.

They had occupied their old stand since 1875, and this is their first experience in the fire business, and they, as well as we, hope it will be their last.

If any of our readers have in any way been inconvenienced by delays in answering their correspondence with this firm, receiving returns for shipments to them, or filling orders, this will explain the reason. They are now located at 521 Walnut street.

Good Apiarian Displays at the Lincoln, Nebr., Fair that was held recently, are reported by the *Breeder and Fancier* for September. It says that "the display of bee-supplies at the Lincoln Fair was very creditable, that of E. Kretchmer, of Red Oak, Iowa, being particularly fine. Among the exhibitors were Stilson & Sons, of York, Nebr., Chas. White, of Farmers' Valley, Nebr., A. C. Davidson, of Omaha, and Levering Bros., of Wiota, Iowa, each of whom made a good display."

The Fall Crop of Honey has been quite good in many localities. This will be a great help where otherwise it would have been necessary to feed the bees for winter. Bro. Root, in *Gleanings* for Oct. 1st, writes thus of the crop of honey this year:

There seems to be a smaller crop of honey this year than usual—at least, there is not very much offered. We notice from the reports, that consignments are small. Does this mean that the honey crop this season was actually smaller this year, even, than last? By the way, the fall honey crop, judging by the letters we are receiving every day, is unusually large. At our basswood apiary we actually had to give the bees more room because they had crammed almost every available cell with honey and brood. Golden-rod has been out in great profusion, and this is, no doubt, the source whence the honey comes.

Another short item, concerning the present prices of honey, is as follows:

It is getting time now for prices on honey to be stiffened up a little. Better figures are usually secured from now on until the holidays than before or later. Watch your chances.

Mr. H. W. Garrett, of Coeyman's Hollow, N. Y., we regret very much to learn, died a few days ago. We have received the following account from a "Friend," dated Oct. 2, 1892:

Mr. H. W. Garrett—one of our best known bee-keepers in Albany county, New York—has joined the great majority. His illness was of several months standing — *La Grippe*, followed by Bright's disease.

He was the owner of a small but well-kept and judiciously-handled apiary. He has been an enthusiastic bee-keeper of wide experience, as he had made apiculture an especial care and study for the past 25 years. He was for years a subscriber to, and an ardent admirer of, the AMERICAN BEE JOURNAL, from which he gleaned many benefits.

FRIEND.

The Globe Bee-Veil, which we offer on page 508 of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, at $1.00 each.

Mineral Wool for Packing bees in winter is inquired about by Mr. D. Lindbeck, of Bishop Hill, Ills., in the following, dated Oct. 3, 1892:

I intend to keep some bees, and I want the best strains combined with beauty. I have had two years' experience, and I find the yellowest bees are the best workers. Out of 16 colonies, spring count, my yellowest bees gave me 108 pounds of surplus, the next best 98 pounds, and my black colony nothing. One brown colony produced 28 pounds, one hybrid 12 pounds, and one colony of Alley's golden Carniolans 54 pounds. My best two queens I bought from the South, and I want to have comfortable hives for their colonies. I think if they are worth keeping, they deserve to be kept in good condition.

I would like to know, through the BEE JOURNAL, whether any bee-keeper has had experience in packing double-walled hives with "mineral wool," charcoal and ground cork, and what is the very best, regardless of cost. D. LINDBECK.

Will those who have had experience in packing with the materials mentioned by Mr. Lindbeck, please send us their reports for publication?

White Clover Comb Honey is bringing a good price now-a-days. One of our Western commission firms, who quote in the BEE JOURNAL, say this in a private letter, dated Sept. 30th, 1892:

We think at present that 18 cents is very high for white clover honey, and when it gets that high it stops the demand. People have been in the habit of buying fancy white clover honey at about 15 cents, and they dislike very much to order large quantities at the high price of 18 cents. By asking 18 or 20 cents for Wisconsin and Illinois honey, it leaves a good market for California honey, to be sold in preference to Wisconsin, Illinois and Minnesota shipments.

Circulars for 1892 have been received at this office from the following:

Edwin E. Smith, Watertown, Conn.—12 pages—Apiarian Supplies.

H. L. Jones, Redbank Plains, near Goodna, Queensland, Australia—36 pages—Bees, Hives and Honey.

Some Flower Messages to All.

ADA M. MELVILLE.

Snowy-fringed daisy-buds, clover and fern !
See how the hearts of the buttercups burn
With sunbeams that hide in their bright yellow cups,
Brimmed o'er with the nectar old Honey-bee sups.
See, how the meadows stretch greenly away
To kiss the blue heavens where birds are at play,
Sunshine and flowers, meadow and sky—
Dear child, art forgetting how suffering ones lie
On couches of pain, shut in from the world,
While you are a-hunting the cool mosses curled
At the foot of the oak-trees, while thickly around
Brown acorn-cups dainty are strewing the ground ?
Snowy-fringed daisy-buds, clover and fern,
See how the hearts of the buttercups burn,
Ah, child at your play, and maidens so fair,
Your lives all untouched by the shadows of care,
Go, carry a breath of the sweet summer day
To the sick and the dying who moan life away;
Go, scatter the buttercup's sunshine abroad—
E'en a flower may carry a message from God.

Chicago, Ills. —Epworth Herald.

Cure for Laying Workers.

I think I have tried about all the different cures reported, and I am not sure that I would use any of them that contemplate the continuance of the colony, unless it be to get the bees to rear another queen. Taken early enough, the bees will respect a queen-cell ; in fact, they are trying to rear a queen with their own useless brood ; and if you give them a frame of good brood you may have a queen reared. But they may not rear a very good queen thus, and in any case it will take some time, and it is better to give them a sealed cell as near hatching as possible. I have succeeded by giving them a young queen just hatched. But after the affair gets to be chronic, and the rounded cappings are seen on the worker-cells, more heroic treatment is needed.

On the whole, I am not sure but it is best in all cases to resort to the heroic treatment of breaking up the colony. Just distribute the contents of the hive, giving one or two frames, bees and all, to each of several other hives : and if you wish anything more continued on the same stand, just put another hive on stand, having in that hive at least two frames of brood with adhering bees, and a sealed queen-cell. After you have experimented long enough at trying to save a colony with laying workers, I feel pretty sure that you will agree with me that the most profitable thing is to break up the whole business, and that it will be cheaper to start a new colony than to continue the old.—Dr. C. C. Miller, in *Gleanings*.

Bee-Keeping and Horticulture.

Bee-keeping has reached such an exact stage now that considerable scientific knowledge of bees and plants must be had before success can be assured. The apiarist must not only know the natural history of the bees, but he must be a patient observer, watching his pets carefully, and ready at a moment's notice to improve upon their condition.

A point that has not yet been fully settled is the relation between the bee-keeper and the fruit-grower. The value of the bees in fertilizing flowers and fruits is not disputed, and it is a question if pomology could advance with such rapid strides as it does if it were not for the bees. Apiculture is the handmaid to horticulture, and the question remains whether the two ought not to be conducted together.

The fruits and flowers must be cultivated for profit, and when they are supplied the richer nectar is prepared for many colonies of bees. The fruit-grower now loses all this nectar or allows his neighbor's bees to carry it away. By having several colonies of bees near his orchard he would not only gather the fruit, but the nectar in their flowers also. Little additional labor would be required for this, as the bees demand very little attention in the fruit season.

Bee Journal Posters, printed in two colors, will be mailed free upon application. They may be used to advantage at Fairs over Bee and Honey Exhibits. We will send sample copies of the Bee Journal to be used in connection with the Posters in securing subscribers. Write a week before the Fair, telling us where to send them. We would like to have a good agent at every Fair.

CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Bee-Feeders, How to Feed, Etc.

Mrs. Atchley, as we have had a poor season in north Texas this year, I will be forched to feed my bees to get them in condition for winter. Will you please tell me a good plan for feeding, that is cheap and reliable? E. C.

Friend E. C., I will give you the plan I use when I have to feed, which is cheap, reliable and quick.

Take a pan or vessel that will hold say a half-gallon, or more if you wish; fill it with syrup made from common brown sugar made a little thinner than you would use on the table. Cut a piece of cheap, thin domestic, just to fit the inside of the vessel, leaving a strip to it to reach over the edge and clear down to the frames. Let this strip be two or three inches wide.

Now turn back the quilt at one corner, place the can on the frames, fill it with syrup, and let the strip go right down to where the bees can reach it. Place on an upper story. Pour the food in just about sundown, and always place the cloth smoothly down on the syrup,

To start the bees quick, pour some food on the strip from the bees up to the food in the pan. You can feed 20 to 30 pounds in a short time in this way, and no bees will get drowned, if you use care.

I do not like any feeder that lets the feed run on out, whether the bees want to take it or not. A cool snap might check them from taking the food fast enough, and a fearful mess is the result.

To make the syrup, take two measures of sugar and one of water. Place on the stove, and let it strike a "boil;" set it off to cool, and it is ready. To keep from granulating add a little cream of tartar—a piece as large as a marble to a gallon of syrup. Now give the bees all they need of this food, and they are safe for winter, as far as food is concerned.

We should all see that the bees have at least 20 pounds of food to the colony as early as Nov. 1st in the South, and only a moderate colony is necessary for the South. It is too expensive in this locality to winter large colonies, as a moderate colony will build up sufficiently strong long before the honey harvest, so more than a half-gallon of bees are fed at a loss to the owner.

Now, don't you Northern bee-folks laugh at this, for I tell you it is true. We need the honey, especially for spring, but half the bees that you need will do for us.

An Experience with Queens, Etc.

I received two queens recently, and put them on frames as directed. I opened the hives in one week, and two days after I looked in, and as I raised the cloth from the frames, the queen was on the box, and flew out before I could get the cloth down. She seemed very lively, and I could not catch her. She was out of sight in a twinkling. That was the last I saw of her. The other one is all right and laying.

We are having a fine flow of honey—the first for nearly four weeks. My bees have averaged about 40 pounds per colony, spring count—all blacks. I bought them last spring, some in very poor condition. I have 28 colonies, and wish to start with 30 next spring; will get some in box-hives and transfer them.

A. BISHER.

Baird, Tex., Sept. 6, 1892.

Friend Bisher, if you will shake a frame of bees at the entrance of the hive when the queen happens to take wing, the roar of the bees going in will attract the queen, and she will return and enter her own hive, and not get lost.

Bee-Keeping in Texas.

I began bee-keeping for myself 12 years ago at Village Mills, Hardin county, Tex. After three years, my wife died, when I sold everything there, and rambled over Texas, Louisiana, Mississippi, Tennessee, New Mexico, and Old Mexico, before locating here in Tyler county. I got my start in bees

here by taking "gums" in pay for practice.

Neches river bottom comes within 3 miles of us, and is from 4 to 8 miles wide, and this near the mouth; 300 miles by its current, it often covers 5 miles with water, when men owning hogs and cattle have to bring them out in boats. There are a few small farms or clearings on high spots, and many of the "swampers," as we call the folks living there, keep a few bees, generally in log-gums—cut off from a black-gum tree, whence the name.

Arkansas State Building at the World's Columbian Exposition, in 1893.

These people usually get their start by hunting a bee-tree. I was at a cutting the last of July. It was a huge cypress 6 feet in diameter, and took two men a full one-half day's work to fell it. They got probably more than 100 pounds of honey, and some 3 pounds of wax, and gave me the bees. At the village I saw 3 men work about 3 hours to cut a cypress, which fell in a slough 10 feet deep, and we never saw even the hole that the bees went into the tree. These men lost their temper, as it was the 4th of July, and quite warm; but before noon they had another tree down, and found about 50 pounds of nice honey.

Last March I went into the edge of Hardin county, in the swamp, to see a sick little girl. Her father and brother-in-law had together then some 115 "gums" of all conceivable styles—flat, round and square. They had a swarm in a 10-pound fish-kit, with a 10-pound tea-caddy on top, and they had wintered and had 8 or 10 pounds of honey left. They were black bees. One colony was in a 20-pound talc-box; another in a roll of hickory bark 3 feet long, and the size of a stove-pipe. One colony was in a pump-tube 4x6 inches, and 3 feet long. Nearly every gum was fastened to a tree by baling-wire, as security against a freshet. They had one dry-goods box about 4x4x6 feet, into which they threw 11 swarms last year. They had in plenty of cross sticks, and were intending to have it filled with combs. I have not heard from them this summer.

GEORGE MOTT, M. D.

Spurger, Tex., Sept. 12, 1892.

Have You Read page 485 yet?

Proof-Reading Queen-Cells.

There is no use in rearing anything but good queens, no difference what kind of a colony you rear them in, for if you know your business you should "proof-read" every cell before "going to press," as we term it. One or two days before the cells are sealed, you should examine them, and see if the food and larvæ are in proportion, so that if there is plenty of jelly, a nice, well-developed queen, and the cell will build long, etc., pass it as O. K.; otherwise destroy it, as you will most assuredly have some worthless queen under any process if you allow them all to be sealed, or "go to press" without being "proof-read."

What kind of a paper would a publisher have without a proof-reader? Well, some papers would be nothing more than a sheet of typographical errors. It is the same with queen-cells. Why, I have seen just as inferior cells from natural swarming as any other way, but not so common. But sometimes after a swarm has issued the old colony keeps right on building cells, and the last ones will be from larvæ too old, and second and third swarms may take all the best queens with them, and leave the parent colony with a worthless queen.

Southern Bee-Keepers, don't forget about the bee-meeting at the Dallas, Tex., Fair, on Oct. 27th. A grand time is expected.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 511, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

At the Dallas Fair, in Texas, on Oct. 27th, a great bee-meeting will be held for Southern bee-keepers. Don't fail to be there.

What About Reversing Frames? —Does it Injure Brood?

Query 840.—1. What is the verdict on reversing frames, now that it has had time to be tested? 2. Does it have any bad effect on the capped brood? 3. Does the pupa move or revolve in the cell? I find them in different positions.—Illinois.

I do not practice it.—J. P. H. Brown.

We have never used reversible frames.—E. France.

1. I reverse only to get full combs. 2. No. 3. I cannot say.—R. L. Taylor.

1. I do not see advantages enough in it to practice reversing to any extent.—Eugene Secor.

1. Little is said about it now, and I think opinions are divided. 2. I think not. 3. Yes.—C. C. Miller.

I have never used reversible frames, but it has always seemed to me to be "agin natur."—Mrs. L. Harrison.

Reversing has always appeared to us to be a child's play, where movable-frame hives are used.—Dadant & Son.

1. I do not practice reversing. 2. I don't think I ever saw any difference in the condition of the brood.—H. D. Cutting.

Reversing the brood-combs is of no advantage whatever. It is one of those measures that add to the toil of the bee-keeper without profitable return.—G. L. Tinker.

From the little experience I have had along this line, I am satisfied that reversing frames does not pay the practical apiarist, in the long run.—G. M. Doolittle.

1. So far as I can learn, they have "rather played out." 2. Not that I have ever seen or heard of. 3. Not by reason of merely reversing, in my opinion.—J. E. Pond.

1. I am using a reversible hive, but consider that feature of doubtful utility. 2. No. 3. I have not noticed it; but have seen them in different positions.—C. H. DIBBERN.

I have found no ill effects whatever from a large experience in reversing. I find the advantages are that it almost wholly prevents swarming, and gives us perfect combs that completely fill the frames.—JAMES HEDDON.

1. It has merit. I tried it well, and know this. But I do not believe it will pay for the trouble. The tendency now is more bees and less manipulation, and very wisely so, with our numerous bad years. 2. *No.* 3. I do not think it moves. If it does, it does no harm, as the brood suffers no harm. Theory says it does not move.—A. J. COOK.

1. I have never reversed brood-combs, and all I know about it is what I have read in the bee-papers. 2. From observation, I do not know. As the young bees in the cells lie on their backs, I would think that reversing would injure them. 3. They could not move except for a very short time after spinning their cocoons, and for a very short time before leaving the cells.—M. MAHIN.

I have given up the practice, as I doubt if it pays (except in extreme cases), for trouble and time expended. I am yearly falling more into the "let alone" policy with my bees—partly from necessity. But, of course, a knowledge of their condition, and an occasional going over, is advisable. I never noticed the bad effect you mention, from this practice.—W. M. BARNUM.

1. Reversing frames causes them to be completely filled with comb, leaving no crevices in which the queen can hide, and which make it difficult to shake or brush the bees from the combs. This adds so largely to their value that I consider reversing appliances worth their cost for this purpose alone. 2. Reversing has no effect on the brood. But except for the purpose mentioned, it is of little value to the honey-producer.—JAMES A. GREEN.

1. I became tired of jumping at new ideas before the reversing question came up, so it almost died before I got to try it. 2. I know it is sure to ruin queens, to turn the cells upside down; but as young bees are more naturally reared in a horizontal position, I do not think reversing would hurt them. 3. I think the pupa moves, as I have watched it do so, and it is pretty busy until it finishes its cocoon. Then it seems to sleep away the rest of its 21 days, as I have pretty closely watched "bare-headed" bees until they hatched.—MRS. JENNIE ATCHLEY.

1. There has been no verdict rendered *authoritatively*. It is simply a matter of experience and experiment. 2. In my experience it is of no value except to have the combs attached closely to the bottom-bars of the frames; otherwise, "reversing" is injurious to the prosperity of the bees. 3. Not until after the *pupa state* has merged into the imago state. The young bees begin to move in the cell only a short while before they begin to cut the cap of the cells.—G. W. DEMAREE.

Report of the Iowa State Bee-Keepers' Convention.

Written for the American Bee Journal
BY J. W. BITTENBENDER.

(Concluded from page 466.)

The first on the programme of the second day of the Iowa State Bee-Keepers' Convention, was the following essay by Mr. O. B. Barrows, of Marshalltown, entitled,

Some of the Things "I Don't Know" About Bee-Keeping.

Having been selected by your honorable President to speak on this subject, I will commence by saying that 18 or 20 years ago, when I first commenced keeping bees, being anxious to increase rapidly, I took Mrs. Tupper's advice and divided them each season for three years. At the end of this period I found I had spent $175, and had but 2 colonies of bees, and nary a pound of honey; and if any person would ask me if that was a good way to increase bees, I would have to answer in the language of Dr. Miller, and say, "I don't know."

I saw a picture of a girl with a little hand force-pump spraying a swarm of bees to make them cluster low. It

looked fine in the picture, so I attached a pipe to our water works, and run it into the center of my bee-yard. I attached a hose, and by turning a cut-off I could throw water 20 or 30 feet high, and from 10 to 15 barrels per hour. After trying it three or four seasons I abandoned it, and if asked if it was a good way to make bees cluster low, I would have to answer, "I don't know."

After the North American Bee-Keepers' Association met in Canada, I read what our Canadian brethren said about spring packing, and the Norwegian bake-oven. It looked very reasonable, so I lined seven hives with paper asbestos, taking care to break-joints with the paper on solid board so there should be no cracks to let in air, or allow heat to escape. I filled the caps seven or eight inches deep with dry straw, then covered all with a broad shade-board to carry off rain, and then watched, expecting to see them build up much faster and swarm much earlier than any other colonies. But imagine my surprise to see a colony in a single-walled hive (with only two thicknesses of burlap, and a shade-board over the brood-frames, and the shade-board raised to give ventilation over the burlap), the first to get strong and send out a swarm. After using those lined hives for three seasons, and having 5 out of 7 of the colonies die from spring dwindling, the past season, if asked if there was any advantage in spring protection, more than given by a single-walled hive, I should have to say, "I don't know."

I have used several bee-smokers, most of them with a valve to the bellows, which often gets wheezy, and for the last two or three years I have used one without a valve to the bellows, and if asked what is the use of a valve to the bellows, I should say, "I don't know."

Last fall I had fears about the so-called honey-dew being suitable for winter stores, and my fears continued all winter, and when the fearful mortality came in the spring, I had fully made up my mind that honey-dew caused it; but afterwards I met a friend in my own county, whose losses were far greater than mine, and received a letter from a friend at Dunlap, whose losses were about the same as mine, and they both assured me that their bees stored no honey-dew, so I am obliged to say about the cause of the great mortality, when I lost 52 out of 100 colonies, that "I don't know."

I have used three different kinds of bee-escapes to get the bees out of the surplus arrangement, and found them all good; but if asked which was the best, I would say, "I don't know."

O. B. BARROWS.

After the above essay, Mr. W. C. Frazier, of Atlantic, read the following, on

Beginners and the Honey Market.

"How can beginners be best educated not to ruin a market for those more experienced?" has been asked.

Honey is a luxury. In order to attract purchasers it must be put up in an attractive form. Not only the honey itself must be clean, but the case, or jar, in which it is exposed for sale must also be neat and attractive.

After securing the honey and casing it neatly, there is just one other thing that must be done to make it sell, namely, put a price on it that will be as attractive as the honey.

To produce the finest grade of comb honey costs money. Supers, sections, separators and comb foundation must all be the best. More attention should be given to the foundation—"thin surplus" is too thick. Some seasons the bees will *thin* foundation; some seasons they eat holes in it and spoil it, and some seasons (and this year was one of them) they use it just as it is when given to them.

Last spring I received a sample, perhaps 6 inches square, of foundation, "extra heavy," 4½ square feet to the pound. I thought it would be a good thing to try, to see how much the bees would thin it, so I cut it into 4 triangular pieces, and placed them in sections. The bees built it out just as it was. The comb they built can be scraped off, and no one could tell that the foundation had ever been used.

If a man has spent time and money building up a market at home, he surely has a better right to that market than any one else. The trouble with beginners is, when they secure a tolerable crop of honey, they become panic-stricken; the demand for honey is not great until the winter months, and they think they must sell, and sell at once; consequently they unload at a price that ruins the market. The remedy for this is hard to prescribe.

If the beginner produces an article worthy of being shipped, and sells at a price that will ruin the market, buy his crop of him, and either ship or retail it at a price that will pay to produce honey. If he is contrary, and will not

sell to you at the rates he will sell to others, the only thing to be done is to beat him at his own game.

Next season put in a stock of section-holders and sections, snow-white and polished; with the newest and best separators, that are the width of the sections; have these sections 8 to the foot, and use very thin foundation in them. These you can sell at a price that will meet competition with any one who has a tendency to cut the price.

Bee-keepers should live in harmony. There is no use in running down prices which are now too low. Comb honey sells now in my market at 10 cents per pound, and extracted at 8 cents. My whole crop of extracted honey will be sold at home, for 8 cents a pound. These prices are low, too low, in fact; no man could keep enough bees to make it pay, off bees alone.

W. C. FRAZIER.

The subject of Mr. Frazier's essay brought out quite a discussion.

Mr. De Clare—It is the small producers that sell their honey at low prices.

Mr. March—In my locality there is not enough honey to supply the market at 20 cents per pound.

Mr. Young—If bee-keepers would all take bee-papers, they would be posted on the honey market.

A Member—I have no trouble to get 15 cents for my honey, and bee-keepers should send their honey to market. They should pay more attention to the producing of fancy honey, and then they should get fancy prices.

Mr. Frazier—I have seen "cut-out" honey sell for as much as fancy honey.

Thos. Johnson—To prepare sections for market, proceed on some cool morning and scrape off all propolis, and thus make them attractive.

Mr. Barrows—Bee-keepers do not investigate the market, and so sell at too low prices.

Mr. Frich—I am a beginner, and know that beginners do ruin the market, because they do not know how to prepare the honey for selling.

Mr. Young—Some bee-keepers think that when other sweets are down, honey must come down also, which is a great mistake.

Mr. Coverdale—All small honey-producers sell their honey too low, because they do not consider it worth holding; and many have no proper place to keep it.

Mr. Fultz—The time is not far off when honey will bring cash, and it is the most satisfactory way of doing business.

THE USE OF BEE-ESCAPES.

The subject of bee-escapes was then taken up.

Mr. Barrows had used three different kinds, and all with success.

Mr. Secor likes the Porter escape best.

Mr. Marshall said that bee-escapes would not give satisfaction when brood is above the brood-chamber.

The following were elected unanimously as officers for the ensuing year:

President, Eugene Secor, Forest City; Vice-President, O. B. Barrows, of Marshalltown; Secretary, J. W. Bittenbender, of Knoxville; and Treasurer, Mrs. J. W. Bittenbender.

J. W. BITTENBENDER, *Sec.*

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Oct. 18, 19.—Illinois State, at Chicago, Ills.
Jas. A. Stone, Sec., Bradfordton, Ills.

Oct. 19.—N. E. Ohio, N. Penn. & W. New York at Sagerstown, Pa.
George Spitler, Sec., Mosiertown, Pa.

Oct. 20.—Southern California at Los Angeles.
Geo. W. Brodbeck, Sec., Los Angeles, Calif.

Nov. 3.—Connecticut, at Hartford, Conn.
Mrs. W. E. Riley, Sec., Waterbury, Conn.

Nov. 28.—Allegany Co., at Angelica, N. Y.
H. L. Dwight, Sec., Friendship, N. Y.

1893.
Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

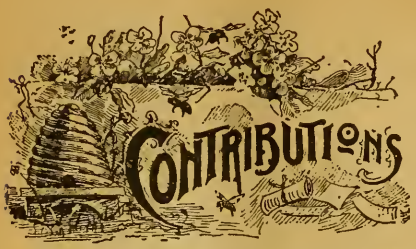
North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

There's Not a Young Person but what can secure at least *one* new subscriber to the BEE JOURNAL, and get the splendid Premium offered on page 485. Try it.



Importance of Experiments in Apiculture.

Written for the American Bee Journal

BY PROF. A. J. COOK.

It may be thought a matter of doubt by some—even of our wise and thoughtful men—whether it pays to experiment, and whether our several States and Nation are warranted in expending money, time and energy in experimenting and in passing laws endowing departments and institutions for the sole purpose of making investigations. The fact that all the most advanced Nations are doing this more and more, and the further fact that one single discovery often brings immense returns, will go far to set all such doubts at rest in the minds of the reading public.

Whether our States are wise in voting money for such purpose, and whether the Hatch Bill, appropriating such a munificent fund (which establishes a station in each State and Territory, and equips it so that if well manned, it can do much and excellent work) was timely and worthy, it is not my purpose now to discuss. We have money appropriated in several States to further experimentation, and aid investigation.

We have the Hatch Act which appropriates $15,000 annually to each State and Territory, which fund is to be used exclusively to further research in all directions that will foster and encourage manual-labor pursuits. Besides these, we have large annual appropriations for the Department of Agriculture, which are given with the express purpose of developing information which shall aid agriculture in all its varied departments. Thus the amount annually appropriated, for the sole purpose of research in the line of agricultural development and progress, is upwards of $750,000.

We see that the civilized world believes that such work is valuable and desirable. We see that our country is taking the lead in this new role of endowed research, especially to unearth new and valuable truth in the aid of the industrial pursuits.

That so much of thought, study and real scientific ability can be devoted to this work of investigation, without real, substantial gain, is certainly not true. Mistakes will be made; incapable men will doubtless be employed, and, in some cases, hasty generalizations will result in erroneous statements and consequent loss and injury; but it goes without saying that, for the most part, very able men will be—are secured to do this work, and exceedingly valuable discoveries are being made. Thus we are warranted richly in the assertion that many new and most valuable facts are now being discovered, and are to be more and more brought to light by this hard-working, untiring body of investigators.

THE GREAT NEEDS OF BEE-CULTURE.

But how is it with bee-keeping? How much of this thought and energy are being used to benefit this art? When we consider the large number of apiarists, the valuable product which they create, and the tremendous supplementary good that they do, in stocking the country with insects that are pre-eminent in the most important work of cross-fertilizing the flowers of our most valued fruits and vegetables, it needs no argument to show that of all the host of manual laborers, none are more worthily employed, or more worthy of just such aid as it is the province of these experiment stations to give. Uncertain seasons; new and subtle diseases; unfair discriminations by our postal authorities, which, though, unintended and thoughtless, are just as hurtful; and the discouraging competition of cheap, insipid, and often unwholesome adulterations, make it all the more important that the worthy class of honey-producers have attention, and that research remove these several obstacles that essay to check the progress of our eager, hard-working bee-keepers.

Notwithstanding the magnitude of the business, its direct and indirect importance, and the crying need of patient and thorough watchfulness or investigation in all the lines mentioned above, yet the Agricultural Department has withdrawn all aid, and, so far as the records show, no States except Michigan, Colorado, Rhode Island, and possibly New York and Iowa, are doing one thing to aid in this important direction. Even the States that have acknowledged,

practically, a duty in this direction, nearly all have dealt out favors (?) most reluctantly, and, I may say, grudgingly.

It seems to me, as one who has kept close watch of this whole matter for years, that the bee-keepers have been neglected, and are entirely warranted in making a most vehement protest. I have seen enough to make me think that any one may secure his rights in our country, if he finds out just what they are, and then insists upon a recognition of them by the powers that be.

The dairymen saw that the sale of oleomargarine as butter was injuring their business. They demanded of the Government a law making the sale of manipulated (or doctored) lard and tallow as butter, a serious misdemeanor; and they secured their end and aim.

Last year we almost secured congressional legislation that would stop the dealing in "futures"—a form of gambling hardly less infamous than the New Orleans lottery—and a general law against adulteration. Both these laws would be righteous, and will soon honor our national statutes, and bless our people.

Thus we see that if we know our rights, and are energetic and determined, we can secure them.

There is no question but that every State—like Illinois, Iowa, Colorado, California, etc.—where the bee-interest is important, should take measures to have their business recognized in the experiment station. Bee-keepers in Illinois are suffering from an unknown bee-disease, which is without doubt a microbe disease. Prof. T. J. Burrill, of the Illinois University, is one of our best students of bacteriology. I doubt if he knows of this malady at all; while I fear that his name will be new to most of the bee-keepers who read this article.

Now, why may not the Illinois Experiment Station very wisely pay a small sum—say from three to five hundred dollars, to some first-class bee-keeper—Dr. C. C. Miller or J. A. Green would fill the bill—to keep a sharp lookout, that advantage may be taken of the wisdom in the University and Station, and the interests of bee-keepers subserved all along the line?

Does any one doubt but that such a person, armed with authority and paid for work, watchfulness and studious interest, would fail to give a manifold return for value received? And certainly no bee-keeper will doubt but that of $15,000 annually paid by the United States Government to each State, for purpose of research, a claim of $300, or even $500, would not be greedy on the part of the bee-keepers.

Why should not this matter come up at the meeting of the Illinois State Bee-Keepers' Association in Chicago on Oct. 18th? Why should not vigorous, ringing resolutions be passed, asking for such just recognition? Why should not this be seconded by a live, wide-awake committee, to press the matter? And why should not every bee-keeper in Illinois send a personal letter to the Director of the Station, urging that the request be granted? Such energetic action, calling for simple right and justice, could but have weighty influence, and most probably would bring success.

And why should not such action be taken at the State conventions of every other State, where bee-keeping is an important industry? This is only pushing for what is just and right. Shall there not be a waking up to earnest action all along the line?

Again, of the large appropriations, reaching away up to thousands and thousands of dollars for research by the Department of Agriculture, why should bee-keepers be ostracised, even though there is a cut of $10,000 in this year's appropriation? Why not reduce the work a little in other lines, rather than cease all work in apicultural research?

I believe that the Government could in no way have spent $1,000 more advantageously than to have kept Mr. Larrabee in the harness. To stop this valuable line of work is surely a mistake, and I believe a real injustice. I believe, even yet, the wrong may be righted. Let the North American Convention, and bee-keepers all over the country, act as I have already suggested for Illinois, and success is assured.

That Secretary Rusk, and Assistant Secretary Willits are in full sympathy with all industrial pursuits, and extend a hearty interest to bee-keepers, there is not a shadow of doubt; that Prof. Riley, who once recommended fruit-growers to plant milk-weeds to destroy bees, is very enthusiastic may not be true, but he could not resist such overwhelming petitions, even though he desired to do so.

Let all move in solid phalanx upon the *head* of the Department, and we shall gain our desires and our rights. I believe there is hardly any action that bee-keepers can take that is as emphatic with promise of generous success and valuable aid.

Agricultural College, Mich.

[For editorial comments, see page 488 of this issue.—Ed.]

Directions for Preparing Comb Honey for Market.

BY F. WILCOX.

The best months to ship comb honey are October and November, and the markets are usually active in those months.

All comb honey should be in small sections. The old-style 10 or 20 pound boxes will not sell in any market.

Honey should be taken from the hives as soon as possible after the harvest is over, and sometimes before; generally as soon as well finished. If not promptly removed, the cappings will become soiled and look brown. We call it "travel stained." This lessens the value of it in the market, but it does not injure its eating or keeping quality.

The sections must be scraped to remove the propolis which always adheres to them as they are removed from the hive.

It is a good plan to pile them on a bench in a warm, well-ventilated room for two or three weeks before crating for market. I prepare a bench for the purpose, by taking boards about 14 inches wide, lay them on empty hives or something like that to get them up from the floor. Lay on them common lath 4¼ inches apart from centers, and place the scraped sections on these so the corners rest on the lath. Those sections that are seen to be fractured or leaky should be piled by themselves. Some will be fractured so slightly that you will not discover it in handling them, but if put at once in shipping-crates would leak and soil others. If piled in this way in the store-room, the leakage drops down between the lath and nothing is daubed.

Another advantage of thus piling them is, if there are any eggs of the bee-moth in them they will all hatch within two or three weeks, and can be seen or known by the fine, white dust on the surface of the combs.

Shipping-crates should always have a strip of glass in one side to show the honey, otherwise it will be broken in handling. If to be sent to commission men, crates should hold from 12 to 24 pounds each; if directly to merchants who retail it, 48-pound crates are as good as any.

Honey should be placed in crates the opposite side up from what it was when on the hives, because combs are always well fastened at the top, while they are not always at the bottom. Combs should stand on edge, not hang suspended. If the combs are not well fastened to the wood on three sides they will not ship safely, and should be kept for the home market, as should also the fractured and leaky ones.

To prevent damage from jerking of trains, tell your freightman to see them loaded in the cars so the combs will run lengthwise of the cars; this will always bring the glass toward the sides of the cars, not toward the ends.

The honey crop is rather short this season, and it should bring fair prices. —*Wisconsin Farmer*, Mauston, Wis.

Fall Work in the Apiary, and Other Subjects.

Written for the American Bee Journal

BY MRS. L. HARRISON.

"The harvest is past, the summer is ended"—and yet there is much important work to be performed in the apiary, if the goal of success is ever attained. Eternal vigilance, and the faithful performance of every little item, is also necessary.

REMOVING SURPLUS HONEY.

The idea of comb honey suggests the most delicate fabric, requiring gentle handling, in order to preserve it in its beauty. What workmanship of man can be compared to the delicate cells of white clover honey, built during a generous flow of nectar from white clover? Touch it with a slight pressure, and it gives way; yet it is strong enough to hold within its walls the precious nectar for all time. Therefore, in all the manipulations of comb honey, "care" is the watchward.

When about to remove comb honey from the hives, in whatever condition it may be in, have all things ready before disturbing the colony. Scrape and clean out the smoker; don't *guess* it is all right, but *know* that it is, and have fuel that emits plenty of smoke. See that the mask or veil is not full of holes, and the tools to be used are not stuck up with propolis.

When all things are ready, uncover the hive with so little jar that the bees are not aware of your presence, and puff in a little smoke to put them on their good behavior. Where a break-joint honey-board is used, under a case of sections, they are not glued down, and can be easily loosened; but when a box or case of sections is placed over the combs with no intervening board, it

requires work, patience and skill to pry them loose.

Where a case of sections has a break-joint honey-board, and are not glued down, the bees can be driven below with a little smoke, the case can be lifted off and set down for a moment, while the hive is being covered up, when the few bees remaining can be driven out, with puffing smoke between the sections, when the case can be carried into the honey-house, and any bees remaining will leave and gather upon the windows. Where the case is glued down tightly, it is well to pry it up the evening before, taking it off in the morning.

There are many persons throughout the country who keep a few colonies of bees to provide their own families with honey (using old-style boxes), and make the enquiry how to get the bees out. If these boxes are removed towards evening, and smoke puffed into them, and placed near to the entrance, the bees will take up a line of march for it and usually by morning they will be out. If few bees leave it, it shows the presence of a queen, and I know no better way than to return it to the hive for a day or so, when it can be removed again, and then she may have gone below. These boxes can be placed in the bottom of a barrel, and covered up, leaving only a small hole; the bees will be attracted to the light and pass out. The hole must be small, or robbers will find their way in.

BEE-ESCAPES OR SUPER-CLEANERS.

British bee-keepers call them "super-cleaners." They are a new invention, but have come to stay. The idea is a small cone that a bee can pass through, but none can return by the same route. These escapes are fitted into a board, and the case of sections lifted up, and the board placed under them. If this is done in the evening, the case can be removed in the morning, when it will be free from bees. Gilt-edged honey is best removed in this way; there would be no discoloration or color from smoke, and the bees would not be frenzied and tear open the cappings of the cells.

Any invention that can assist bee-keepers to put honey upon the market in a first-class condition, should be warmly welcomed.

EXTRACTED HONEY.

There would soon be a large demand for this product, if the populace could be assured that it was unadulterated, and it was neatly put upon the market in an attractive shape. I once bought a tin can of honey, in order to see how other's sent it to market. When I pried up the lid, the first thing that I saw was the leg and wing of a bee.

A groceryman once said to the writer, "I wish that fellow that left that honey here would come and take it away, for I would as soon have soap-grease in my store." Neatness first, last, and all the time, is a desideratum in its production.

Bee-escapes are good assistance in the production of extracted honey. In an evening, the upper story—the story containing the combs to be extracted—can be lifted up and an escape put under, and by next morning the bees have gone below, and the combs can be removed, without having to brush off the bees from each one, which greatly irritates them.

Where honey is extracted by the ton, and run into large tanks, the impurities will rise to the top, while the honey can be drawn from a gate at the bottom; but those who produce honey in a small way (and they are probably the largest number), had better run it into vessels through cheese-cloth. As I produce honey only in a small way, I run the honey from the extractor into large jars or tin cans with cheese-cloth tied over the top, and when a vessel is full, remove this cloth, and tie another one of the same material over it. In this way all impurities are kept out, which is better than skimming them off the surface of the honey after they have risen to the top.

KEEP DIFFERENT KINDS OF HONEY APART.

Mr. Muth, of Cincinnati, has done much to instruct the public to know what pure honey is, and to induce producers to keep honeys unmixed, so that white clover would have its own flavor, basswoods, etc. This is not possible at all times, but only when a large flow is from one source.

ARE BEES A NUISANCE?

Yes, they can be made such, but not necessarily. If the surplus honey is removed, when no honey is to be had in the fields, great care should be exercised, lest the bees become irritated and revengeful. When surplus honey is being removed, if the hive is jarred, the bees will rush out pell-mell to defend it; when the operator reaches for his smoke he has none—it is out. His hair is soon full of angry bees, for they have found holes in his mask or veil, and in desperation he drops the case of sections, and, leaving the hive uncovered, beats a retreat. The cat will run up a tree,

with its tail as large as a rolling-pin; the dog scamper, howling and turning summersaults in the direction of the barn; chickens seeking the shelter of bushes, frantically trying to scratch off the bees from their combs; horses and cows will throw up their tails, and seek shelter; and the apiary will be so demoralized that it will be days before quiet reigns, so that a person can enter it without molestation.

Peoria, Ills.

Progeny of Italian Queen Mated with Black Drone, Etc.

Written for the American Bee Journal

BY S. E. MILLER.

The above is the subject of a Query on page 172, and the question is, "Do you believe that an Italian queen, yellow or dark colored, mated with a black drone, will produce all three or more banded worker bees?"

Messrs. Mason, Miller, Cutting and others say "No." Hambaugh, "Yes." Mrs. Heater, "Yes, but not often." But I should consider Prof. Cook on this question like the elephant at the convention—he weighs more than all the others together. He says: "I think that in rare cases she might do so..... Crossing bees works just as crossing higher animals." This last sentence is hitting the nail squarely on the head, and so long as we cannot know positively with what kind of a drone a queen mates, the best we can do is to judge them in this way.

Let us make a comparison. We will say, mate a pure, or, if you please, a thoroughbred brown Leghorn hen with a Plymouth Rock cock. Who will say that all of the eggs from this hen (so long as she remained fertile from said cock), if hatched and reared to maturity, would show all the markings of the Leghorn race? Who can name a case of this kind? I very much doubt whether one has ever been known, or a similar one, with any kind of animal, hogs, cattle, or any stock. On the other hand, I believe, and my observations confirm my belief, that the progeny of any animal is more likely to follow in appearance and characteristics the sire than the dame.

STANDARD OF PURITY IN BEES.

All three-banded workers are a good enough standard of purity in the Italian bee for me, but there is no telling how soon the standard will be raised to five bands, and then some fellow will go to rearing ten or twelve banded workers!

SEVERAL EGGS IN A CELL.

Mr. A. C. Aten, on page 333, has noticed that a queen sometimes lays more than one egg in a cell. This is not so very uncommon when there are not bees enough in the hive to cover the brood and eggs.

MOTH-WORMS AND BLACK BEES.

Mr. E. France, on page 648 of *Gleanings* for Sept. 1st, says: "Black bees are as proof against moth-worms as Italians." I will admit it if the black colony is very strong, and the Italians very weak. He cites a case in which moth-worms were plentiful in combs in a quadruple hive, while his black bees were not infested in another apartment of the same hives. I do not blame the worms for not bothering the bees so long as they had plenty to eat without going among the bees.

BLACK BEES VS. ITALIANS.

Mr. R. A. Shultz, on page 338 of the BEE JOURNAL, also stands up for Mr. Ellingwood on the "Blacks *vs.* Italians" subject. Well, just let those fellows keep their black bees. I am not afraid of any of their old black drones mating with my Italian queens.

GOLDEN-ROD AND SPANISH-NEEDLE.

Somebody (I believe it was those "miserable Frenchmen" over at Hamilton, Ills., as Dr. Miller calls them) intimated that much of the golden-rod and aster honey (so-called) was gathered from Spanish-needle. Here it is reversed. All of our Spanish-needle honey is gathered from boneset, aster and golden-rod—mostly from boneset.

Bluffton, Mo.

Distance Bees Fly for Nectar.

Written for the American Bee Journal

BY J. H. ANDRE.

When haying this season, I saw Italian bees working on the clover blossoms. Being well acquainted with the vicinity, I knew there were no Italian colonies nearer than 1⅝ miles, unless they were wild ones.

Several days ago I caught one of the bees about 1½ miles from the apiary, and set it to work on thin syrup. Prob-

ably it would fill and discharge its load of syrup much quicker than it would from flowers of any kind. By timing it, I ascertained it was gone 24 minutes, without including its time of filling. Probably it would have taken at least half an hour at each flight when working upon flowers.

It seems hardly possible that they would be profitable gathering honey from that distance, and yet some will make the off-hand assertions that they will do well when gathering honey from 2 to 3 miles away. I have been a practical bee-hunter for 35 years, and for the last 20 I have been an expert, if I am allowed to use the expression of my neighbors. One mile is the farthest I ever lined bees until this season. I very much doubt that black bees go farther, unless they have strong inducements. In fact, I think those spoken of would not have foraged that distance, only they were some I sold during May, and they returned to their old haunts, and kept it during the season.

Lockwood, N. Y., Sept. 12, 1892.

Apiarian Exhibit at the Toronto, Ont., Industrial Exhibition.

Written for the American Bee Journal

BY R. F. HOLTERMANN.

The Toronto Exhibition is, I think, justly considered the most successful exhibition, held from year to year, in America, and therefore in the world.

The honey exhibit was good, the display not larger than previous years, but the quality of the honey was of the very best. The exhibitors were Messrs. J. B. Hall, of Woodstock; R. H. Smith, of Bracebridge; E. L. Goold & Co., of Brantford; Geo. Laing, of Milton; and W. Alford, of Ottawa.

Toronto exhibitors have to expend a great deal of time and trouble in filling honey in neat and attractive packages of glass; this gives those unable to attend in person, and at a long distance, no chance to compete for prizes in which display is taken into consideration.

The decision of the judges in awarding the prize for the most tasty and neatly arranged exhibit, did not agree with that of the majority of the exhibitors, or with that of the public generally. Perhaps it would be well to leave the awarding of this prize to artists. The awards were as follows:

Best display of 100 pounds of extracted granulated honey—1st, Geo. Laing, R. H. Smith, and Wm. Alford.

Best display of 500 pounds of liquid extracted honey, of which not less than 250 pounds must be in glass, quality to be considered—R. H. Smith, E. L. Goold & Co., J. B. Hall, and Geo. Laing.

Best display of 500 pounds of comb honey in sections, quality to be considered—J. B. Hall, E. L. Goold & Co., and Geo. Laing.

Best display of 20 pounds of comb honey in sections, quality to be considered—J. B. Hall, R. H. Smith and Geo. Laing.

Best display of 100 pounds of extracted liquid linden honey, in glass, quality to be considered—Messrs. Laing and Goold & Co.

Best display of 100 pounds of extracted liquid clover honey, in glass, quality to be considered—E. L. Goold & Co., J. B. Hall and R. H. Smith.

Best beeswax, not less than 10 pounds, (manufacturers of comb foundation excluded)—Geo. Laing, R. H. Smith and W. Alford.

Best comb foundation for brood-chambers; best comb foundation for sections; best apiarian supplies; and best style and assortment of glass for retailing extracted honey—E. L. Goold & Co.

Best section super for top story, and system of manipulating, product to be exhibited in super as left by the bees—J. B. Hall, Geo. Laing and E. L. Goold & Co.

In the above, Mr. Hall's and Mr. Laing's supers were alike, being the Heddon, and several could not see why the judges should have awarded in any other way than 1st equally to those two.

Best and most practical and new invention never shown before at this exhibition—E. L. Goold & Co., J. B. Hall, and R. H. Smith.

E. L. Goold & Co. took 1st on an improvement on the honey-extractor, described in the AMERICAN BEE JOURNAL last spring. J. B. Hall took 2nd on a register in an apiary, which he will perhaps be kind enough to describe in the AMERICAN BEE JOURNAL. R. H. Smith took 3rd on a section-crate lid-hinge.

Largest and best variety of domestic uses to which honey may be put—R. H. Smith, Messrs. Laing and Holtermann.

To the most tasty and neatly arranged exhibit of honey in the Apiarian Department—Messrs. Hall, Smith and Laing.

To the exhibitor taking the largest number of 1st prizes for honey at this exhibition—J. B. Hall and R. H. Smith.

Brantford, Ont.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Report for the Season, Etc.

I extracted 4,000 pounds of honey from 60 colonies, spring count, and increased to 110. All are in good condition for winter. I am well pleased with the BEE JOURNAL, and could not get along without it. FRANK MOESER.
Minneapolis, Minn., Oct. 3, 1892.

Still Gathering Honey.

Bees are still gathering a little honey, but the season is about over, and the average all around is about half as good as last season. Here are three fast friends: A. E. Jameson, his yard of bees, and the AMERICAN BEE JOURNAL.
A. E. JAMESON.
Weeping Water, Nebr., Oct. 4, 1892.

My Experience with Bees, Etc.

I have 51 colonies of bees, and live on the prairie four miles from the timber. I winter the bees in a top-ground brick-cellar. I put in 54 colonies, one hive on top of the other, four high, and fed them nearly a barrel of granulated sugar before putting them in on Nov. 13th, 1891. I took them out on March 24th, and they were all alive, except the ones underneath were moldy, and in a weak condition.

I fed them nearly a barrel of granulated sugar in the spring, and up to June 4th, 4 colonies dwindled and died, and in July 4 others died.

The fields were white with clover, but the bees did very little on it. They are the common black bees, excepting 6 colonies of Italians. I have had only 2 swarms, and they were from an Italian colony. They begun on the smart-weed and Spanish-needle about Aug. 1st, and since that time I never saw the bees carry in honey so fast. I will get from nothing up to 84 pounds to the colony, and will take off about 1,500 pounds in all. It is ready sale at 20 cents per pound.

I use the Langstroth 8-frame hive, and have an evergreen hedge on the west side of my apiary 25 feet high; the branches on the west side drooping down to the ground, and on the east they are trimmed so that I can walk under them. The hives are three feet from the trunks of the trees. I am thinking of wintering the bees on the summer stands, by putting corn-fodder between the hives and the trees, and covering them all up except the entrances. Will some one tell me whether this is a good idea? THOMAS MAYS.
Mays, Ills., Sept. 29, 1892.

Must Feed for Wintering.

I expect to have to feed my bees this fall for winter. There is practically no honey here this year.
WARREN P. ADAMS.
Abington, Pa., Sept. 28, 1892.

Bees Did Fairly Well.

My bees have done fairly well this year. I obtained from 11 colonies, spring count, 400 pounds of extracted honey and 300 pounds of comb honey, besides increasing to 16 colonies.
W. C. ALLEN.
Metea, Ind., Oct. 4, 1892.

Late Swarm of Black Bees.

I had a swarm of black bees to-day—Oct. 1st. They clustered on a plum-tree. I put down a light spread, shook the bees down, caught the queen, and let the bees go back to their old home, as it is pretty late for swarms, and sugar is up. C. V. MANN.
Riverton, Ills.

Failure of Honey-Predictions, Etc.

On page 406, Mr. Sam Wilson takes to task Mr. Thomas Johnson, because the latter said he (Wilson) had failed in his predictions of the honey-flow for 1892. I wish to say that Mr. Wilson has missed it here in Cass county, where he said we would have the greatest failure.

About a year ago Mr. Wilson asked space in the BEE JOURNAL to tell the bee-keepers of the land why and how he could tell when we were to have a

honey-flow, or a failure, and the editor granted him space; but he has not yet given us his theory upon which he bases his predictions. Some may say that the mere assertion that Mr. Wilson has failed in his prediction, without giving any data, is not sufficient proof.

I have 36 colonies of bees. From my best colony I extracted 210 pounds, from the next best I extracted 180 pounds, and from none of the others have I taken less than 40 pounds. I think my success is due to the fact that I do not let my bees swarm any more than I can help, but work them for honey until the honey-flow is about over, and then divide and make as many colonies as I wish. J. E. STONER.

Atlantic, Iowa, Sept. 30, 1892.

Honey Crop a Fair Average.

I think that my honey crop is a fair average. I have 5 colonies, and secured 300 pounds of comb honey, or 60 pounds per colony. I think that is very well, taking everything into consideration, and especially the poor summer we had. JOHN H. RUPP.

Washington, Kans., Oct. 3, 1892.

Best Season for Years.

This was the best honey year since I have kept bees. I never before saw the fields so covered with white clover, and the basswood trees were never so full of blossoms as this year. I got some nice white honey, and would have taken much more if the colonies had been strong when the honey-flow commenced. They became very weak through the winter, and one colony died in the spring.

Last winter bees had poor honey for stores, and when I opened the hives on the first warm day in the spring, the hives were full of dirt and dead bees; just a small portion of the colonies and the queens were left; and if we had had a good spring so that they could get strong by the right time, it would have been all right, but with cold weather they could not breed up. The first swarms I had in the last part of July, and some colonies did not swarm at all. My 13 colonies are in good condition, and I hope we will have a good honey year in 1893. CHAS. DUCLOS.

Saginaw, Mich., Oct. 3, 1893.

Read our great offer on page 485.

AMERICAN BEE JOURNAL

ESTABLISHED IN 1861 — OLDEST BEE PAPER IN AMERICA

PUBLISHED WEEKLY BY

GEORGE W. YORK & CO.,

At One Dollar a Year,

199 RANDOLPH ST., CHICAGO, ILLS.

TO CORRESPONDENTS.

The Bee Journal is sent to subscribers until an order is received by the publishers for its discontinuance, and all arrearages are paid.

A Sample Copy of the BEE JOURNAL will be sent FREE upon application.

How to Send Money.—Remit by Express, Post-Office Money Order, or Bank Draft on New York or Chicago. If none of these can be had, Register your Letter, affixing Stamps both for postage and registry, and take a receipt for it. Money sent thus, IS AT OUR RISK; otherwise it is not. Do not send Checks on Local Banks—we have to pay 25 cents each, to get them cashed.

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Emerson Binders, made especially for the AMERICAN BEE JOURNAL, are convenient for preserving each weekly Number, as fast as received. They will be sent, post-paid, for 50 cts. each. They cannot be sent by mail to Canada.

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Always State the Post-Office to which your paper is addressed, when writing to us.

Special Notices.

The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription to the *end* of next December:

Wallace Porter Dec92
Suffield, Portage co, Ohio

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given n the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	*Club.*
The American Bee Journal.....	$1 00....	
and Gleanings in Bee-Culture....	2 00....	1 75
Bee-Keepers' Review.....	2 00....	1 75
The Apiculturist.....	1 75....	1 65
Bee-Keepers' Guide.....	1 50....	1 40
American Bee-Keeper.....	1 50....	1 40
Canadian Bee Journal.....	2 00 ...	1 75
Nebraska Bee-Keeper.....	1 50....	1 35
The 8 above-named papers	6 25....	5 25
and Langstroth Revised (Dadant)	2 40....	2 25
Cook's Manual	2 00....	1 75
Doolittle on Queen-Rearing.	2 00....	1 65
Bees and Honey (Newman)..	2 00....	1 75
Advanced Bee-Culture.....	1 50....	1 40
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Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Be Sure to read offer on page 485.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—To sell, good Apiary and Fixtures at Pattonsburg, Mo. Good location. Address, G. F. TUCKER.
14A4t Yellville, Ark.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

Convention Notices.

CONNECTICUT.—The fall meeting of the Connecticut Bee-Keepers' Association will be held at the Capitol at Hartford, on Thursday, Nov. 3rd, 1892. MRS. W. E. RILEY, Sec.
Waterbury, Conn.

CALIFORNIA.—The annual session of the Southern California Bee-Keepers' Association will be held at the Chamber of Commerce in Los Angeles, on Oct. 20th, 1892, at 9 a. m.
Los Angeles, Cal. G. W. BRODBECK. Sec.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m. on Monday, Nov. 28, 1892. All bee-keepers are invited to attend.
Friendship, N. Y. H. L. DWIGHT, Sec.

ILLINOIS.—The Illinois State Bee-Keepers Association will hold a two days' session at the Commercial Hotel in Chicago, Ills., Tuesday and Wednesday, Oct. 18th and 19th, 1892—the week of the Dedication of the World's Fair building. Reduced railroad rates will then be expected, and a large attendance of bee-keepers from the whole country.
Bradfordton, Ills. JAS. A. STONE, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

PENNSYLVANIA.—The 13th annual convention of the Northeastern Ohio, Northern Pennsylvania and Western New York Bee-Keepers' Association will be held in the parlors of the Mineral Springs Hotel at Saegerstown, Pa., on Oct. 19th, 1892, at 10 o'clock, a. m., for a two-days' session. The program will consist of practical topics, discussed by practical bee-keepers. Saegerstown is situated six miles east of Meadville, on the New York, Pennsylvania and Ohio railroad. Reduced rates to those attending the convention have been secured. Saegerstown is one of the finest summer resorts of the country. A steamer is afloat on the river, which will be at the disposal of all wishing it. Let all attend who can. Ladies are especially invited. Programs will be sent to others upon request, by the Secretary. GEORGE SPITLER, Sec.
Mosiertown, Pa.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 511.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., OCTOBER 20, 1892. NO. 17.

The Honey-Bee, that wanders all day long
The field, the woodland, and the garden o'er,
To gather in its fragrant winter store.
Humming in calm content its quiet song,
Seeks not alone the rose's glowing breast,
The lily's dainty cup, the violet's lips;
But from all rank and noisome weeds it sips
The single drop of sweetness ever pressed
Within the poisoned chalice. Thus, if WE
Seek only to draw forth only the hidden sweet
In all the varied HUMAN flowers WE meet
In the wide garden of humanity,
And, like the bee, if home the spoil we bear,
Hived in our hearts, it turns to nectar there.

The foregoing beautiful stanza was thoughtfully sent to us by Dr. Albert Sayler, of New Palestine, Ohio. Accompanying it was the following:

FRIEND YORK:—The enclosed incomparable sonnet, by the poet A. C. Lynch, is taken from that "Queen" of Grammars—Brown, 1877 edition, page 151. The three words in capital letters are not emphasized in the Grammar; but by reading you will notice that they are the especially emphatic words in the entire sonnet. ALBERT SAYLER, M. D.

October 20th and 21st will be "red letter" days for Chicago, on account of the dedication of the World's Fair buildings. Visitors—150,000—are expected to be here.

Mr. Frank Benton, of Washington, D. C., expected to be at the convention of the Illinois State Convention, but the notice about his attending, we are sorry to say, was not received in time to make the announcement last week. We mention it now, though not in time for the good of the convention, which begins before this issue of the BEE JOURNAL is mailed. In a letter to Thomas G. Newman, dated Oct. 8, 1892, Mr. Benton writes:

I have just been handed a commission from the Secretary of Agriculture, that authorizes me to attend, as a delegate, from the Department of Agriculture, the next meeting of the Illinois State Bee-Keepers' Association at Chicago.

I shall present a few thoughts on "Modern Bee-Keeping in Europe," at the convention. Very truly yours,

FRANK BENTON,
Apiarist U. S. Dept. Agriculture.

Eight Extra Pages are added this week to accommodate a few premium pages. Look at every page and see if we do not offer something that you want. It will pay you to get some new subscribers for the BEE JOURNAL, and secure one or more of the premiums offered.

The Apiarian Exhibit at the World's Fair will soon demand the interest and hearty co-operation of every honey-producer in the World. No doubt something definite will be done soon to start active preparations for the finest

display of bees, honey, wax, apiarian implements, etc., that has ever been the delight of the most favored to behold.

Regarding what was published on page 426 of the BEE JOURNAL for Sept. 29th, Mr. W. I. Buchanan, Chief of the Agricultural Department of the great Fair, wrote us as follows on Sept. 30:

MR. GEO. W. YORK,
Editor American Bee Journal.

Dear Sir :—I have just read with interest the editorial on page 426 of the issue of the BEE JOURNAL for Sept. 29th, regarding the World's Fair exhibit, and I wish to congratulate you and the honey-producers on having struck the right road, in my estimation, to make an exhibit that will attract peoples' attention, and be in keeping with the importance of the Exposition. The ordinary acceptation of an exhibit of honey seems to be that it should excel in mass, or in quantity. I have never believed in this, and do not believe in it yet, and I sincerely hope that the Exposition next year will be the means of bringing out in a handsome manner, as I know it can be, the beautiful designs that can be made of honey, and the interesting exhibit that can be prepared by those who are progressive bee-keepers.

This Department will be very glad to furnish any facilities it can, to meet any conditions confronting exhibitors who are trying to produce something that will be an attraction in the building.

Very respectfully yours,
W. I. BUCHANAN,
Chief, Department of Agriculture.

We are glad to note the interest which Chief Buchanan manifests in the proposed apiarian exhibit, and honey-producers will appreciate the approval and generous support and encouragement of the Department of which Mr. Buchanan is the head.

We recently received a letter of inquiry from Mr. F. Hahman, the Secretary of the Philadelphia Bee-Keepers' Association, which we referred to Mr. Buchanan for reply, knowing that he could answer Mr. Hahman far better than we could. Here is what he says:

MR. GEO. W. YORK,
Editor American Bee Journal.

My Dear Sir :—I note the enclosure from Mr. Hahman, of Philadelphia, and have read it over, and, in reply, I beg to say that it is the purpose of this Department to have an exhibit of bees showing all varieties, that they will be shown in observation hives, and that I am now endeavoring to arrange with the manufacturers of hives who desire to show observation hives to see if I cannot get them to arrange their exhibit so that it will take care of this feature of the honey exhibit, and when I hear from them, I will be able to give a definite answer as to whether or not we can accept an exhibit of bees in observation hives. The observation hives will be placed against the walls of the building on the second floor, and the bees will have ingress and egress from and to the hives from the outside.

The cases mentioned in the circular letter published in June, are simply for comb honey and extracted honey where it is desired. They are intended to keep the comb honey from the dust, and from being soiled by people handling it.

I connot tell at this time whether we shall build one, two or three large observation hives with apartments, or whether the other arrangement will be carried out, of making the exhibit of a number of smaller observation hives. I will be able to give a definite answer to this as soon as I hear from the manufacturers. Very respectfully yours,

W. I. BUCHANAN,
Chief, Department of Agriculture.

The foregoing letter we mailed to Mr. Hahman, and have received the following interesting comment thereon, with numerous suggestions:

MESSRS. GEO. W. YORK & CO.

Gentlemen :—I was much pleased with the perusal of the enclosed letter from Mr. W. I. Buchanan, Chief of the Department of Agriculture of the World's Fair.

If in place, I would desire to offer several suggestions, as follows:

I believe that the compartment-hive plan is impracticable, when bees are to be domiciled for so long a time; the close proximity of the colonies would inconvenience the apiarist in the necessary attention which the bees require.

The observation hive is the best plan, the observatory hive to be furnished by the exhibitor. The manufacturers of hives will hardly furnish observatory hives, because such hives are never used in practical apiculture, and are in reality only *exhibition* hives.

One attendant apiarist will be abso-

lutely necessary to take care of the bee-exhibit. A hand rail should extend along the rear end of the hives, and two feet distant from the same, to allow the public to inspect the bees closely without being able to jostle the hives.

The colonies should stand in a line, about 2 feet apart, on a staging, about the height of an ordinary table or desk—the most convenient height for the sight-seer.

The colonies will necessarily need some attention during the six months sojourn at the exhibition. To open a hive, and keep the bees from roaming all over the Agricultural Building is not an easy matter to accomplish—enclosing the hives in a separate room would not remedy this evil. The best method I can think of would be, to take the colonies into the open air, if they could be conveniently carried out, meanwhile closing the exit tubes by an arrangement similar to the damper in a stove-pipe, located near the hive end of the tube, thus allowing the flying bees to cluster inside and around the entrance end of the tube, without being able to enter the building; opening the "damper" when the hive is again in place.

Yours truly,
F. Hahman,
Sec. Phila. Bee-Keepers' Association.

Not Sold.—A few weeks ago we said that the *White Mountain Apiarist* had been sold to Mr. E. F. Quigley, the publisher of the *Progressive Bee-Keeper;* but it seems according to the following paragraph from Mr. Q.'s last issue, he did not buy the other paper, after all:

As we were going to press last month, we received a letter from A. D. Ellingwood, stating the price he asked for the *White Mountain Apiarist* subscription list. We wrote him we would take it, but before remittance was sent him, he changed his mind, and concluded he would publish it himself.

Later.—Since the foregoing was put in type, we have received a letter from Mr. Ellingwood himself, correcting the notice we had given about the sale of his paper. His letter is dated Oct. 6, 1892, and reads as follows:

In a recent number of your excellent Amercian Bee Journal, you stated that the subscription list of the *White Mountain Apiarist* had been sold. This is a mistake; it has not been sold, and will not be sold. The first of November the *Apiarist* is to appear under the name of "Country Life," and is to be 16 pages, with 3 columns on a page. All subscriptions and advertising matter will be finished by the new journal.

Yours truly,
A. D. Ellingwood.

We are always glad to correct mistakes, when it is possible to do so. We took the first notice from the *Progressive Bee-Keeper*, which stated prematurely that it had purchased Mr. Ellingwood's list.

The Hive and Honey-Bee—the book written by Langstroth, revised by Dadant, and translated by the latter into French—has lately been given the honors of a re-translation into Russian, by Mr. G. Kandratieff, editor of the Russian *Journal of Apiculture* and Director-in-Chief of the Imperial Opera at St. Petersburg. The work is an exact translation of the French edition, and contains 482 pages. This is a new honor both for Father Langstroth and the Dadants, which is indeed well merited.

Many Premiums are offered in this number of the Bee Journal, and you should avail yourself of them. A little effort among your bee-keeping neighbors no doubt would result in an increased number of new readers for the Bee Journal, and at the same time secure some of our excellent premiums for yourself. Show the Bee Journal to your apiarian friends, and see how quickly they will subscribe when it costs less than *two cents a week.*

Your Subscription to the Bee Journal—is it paid up to date? If not, please send to us a dollar for a year, and thus show your appreciation of our efforts in your behalf. Look at your wrapper-label, and if the date looks like this—"Dec91," that $1.00 sent to this office will make it look like this—Dec92.

Giving Due Credit, as mentioned on page 425, has called out a lengthy explanation and very proper *amende* from the *Canadian Bee Journal*, in which the assistant editor says that failing to credit the article in question to the *Bee-Keepers' Review* was "entirely unintentional, and merely an accident which they quite regret." We are glad to note that the *Canadian Bee Journal*, as well as the other more prominent bee-papers, are not given to "fault-finding." When all are intent upon serving the best interests of the pursuit, no time or space will be found for bickerings.

Australian Bee-Keepers are making progress, as is shown by their bee-periodical and other apiarian correspondence in various agricultural papers published in that country.

In the *Farm and Home*, issued at Melbourne, we find the following which was sent as a circular by the Secretary of the Bee-Keepers' Association to all Agricultural Societies in the colony:

GENTLEMEN:—At a convention of bee-keepers held at Melbourne on June 7th and 8th, 1892, the matter of bee exhibits at agricultural and horticultural shows was reviewed in essays by members, and afterwards discussed. As you are doubtless aware, bee-keeping, on scientific aud economic principles, has of late years been undergoing rapid development all over the world. We have been rather behind in this matter in Victoria, but in view of the immense quantity of good honey which may be gathered and utilized, as public knowledge extends, we beg to approach you and ask that, when preparing a schedule of prizes for forthcoming shows, you will kindly offer them in such amount, and subject to such conditions as will tend to develop the industry of bee-keeping in your district.

For your guidance we beg to submit the following conditions, as requisite for successful exhibition:

HONEY.—In quantities of not less than 14 pounds in glass—as representing an amount gathered during the present year (if autumn shows), or in the previous year (if spring shows) of 150 pounds—declaration to that effect required.

HONEY IN COMB.—Quantity of exhibit, 12 pounds in sections, to represent a bulk taken (as above) of 75 pounds.

EXHIBIT OF APIARIAN APPLIANCES.—Largest collection, the *bona fide* property of exhibitor.

BEES ON COMB UNDER GLASS.—Best exhibit of any sort.

We further beg to advise the following points in judging:

HONEY.—Flavor	50	points.
Color	20	"
Clearness	20	"
Neatness of exhibit	10	"
	100	"

HONEY IN COMB—		
Flavor of honey	50	"
Fullness and finish of boxes	25	"
Whiteness of comb	15	"
Neatness of exhibit	10	"
	100	"

EXHIBIT OF APPLIANCES.—Should include hives, honey-extractor, and all necessary implements. Greatest variety, utility, and best finish to claim prizes.

BEES ON COMB.—Queen, workers and drones to be shown on comb of brood. In judging Ligurian stock, local appointments had better be made, exhibitors nominating their judges. Failing this, expert judgment to be secured at the nearest point. Judgment by points:

Color and marking of workers	50	points.
" " drones	25	"
Color, shape, and general appearance of queen	15	"
Neatness of exhibit	10	"
	100	"

L. T. CHAMBERS, HON. *Sec.*

"The Winter Problem in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apiary. Price, postpaid, 50 cents; or given as a premium for getting two new subscribers to the BEE JOURNAL for a year. Now is the time to read this pamphlet, and thus prepare your bees properly for winter. Send to us for a copy.

Cork for Winter Packing of bees is thus inquired about by Mr. D. Lindbeck, of Bishop Hill, Ills. :

1. How many cubic inches in one pound of ground cork for winter packing for bees?

2. How is the packing done for single-walled hives?

3. I presume there must be an outer case; if so, what thickness is required?

I wish I knew all about wintering bees successfully. I have some fine bees, and would not like to lose them at any price.

D. LINDBECK.

Mr. J. A. Green, to whom we referred the above questions, sends the following as his reply:

1. I have never used ground cork, so I cannot answer the question as to bulk. I believe its advocates claim that it will absorb a larger quantity of moisture than other materials, without rotting or mildewing; and also that it is a very poor conductor of heat. The latter quality is a good one, and may make its use profitable; but as to the former, I do not think that absorbents of moisture are necessary or desirable about a bee-hive.

2. To prepare single-walled hives for wintering, first see that there is a good colony of bees with at least 20 pounds of stores of good quality. These stores should be in as few frames as possible, and any further space, if there is any, filled with division-boards. See that the top of the hive is tight, and that the entrance is of good size. My hives have an entrance 12x⅜, which I leave open the full width for wintering.

Now place over the hive as it sits on its summer stand, a box without top or bottom, six inches or more larger than the hive every way. This will leave a space of three inches on the sides, and six inches on the top, to be filled with packing material. For this I generally use shavings from a planing mill, which answer the purpose very well. They are probably not quite as good as cork, but they usually cost little or nothing but the hauling. Sawdust is excellent, and soft leaves answer nicely.

The front end of the packing box should be cut away to correspond with the entrance, and a "bridge" or covered passage-way provided, so that the packing material will not obstruct the entrance. The packing should be pressed down sufficiently so that it will not settle during the winter so as to leave unprotected spaces. Over all a good tight roof should be place. I use for this purpose a sheet of corrugated iron, large enough to project a little on all sides. This makes a simple, cheap, durable and entirely reliable covering, which may be stored away in a very small space when not in use. To keep the wind from blowing it away, a board is laid across, with a stone or large brick on it. These sheets of iron, if given a coat of paint occasionally, will last many years. They may not look as well as a more elaborate covering, but for utility they cannot be beaten.

3. The outer case may be made so that it simply holds the packing in place, or it may be so tightly made, or of such thick material, that it is a protection in itself. Most of mine are made of lath, which seems to answer the purpose about as well as more expensive material.

J. A. GREEN.

We may add to what Mr. Green has to say in reply to the first question, that 1½ bushels of ground cork weighs about 15 pounds.

Others who have used cork as winter packing material, are requested to give their opinion of it, for publication in the BEE JOURNAL.

A Bee-Paper Burned.—Mr. E. F. Quigley, of Unionville, Mo., editor and publisher of the *Progressive Bee-Keeper*, we are sorry to learn, has met with loss by fire. On Oct. 10, 1892, we received the following letter from him:

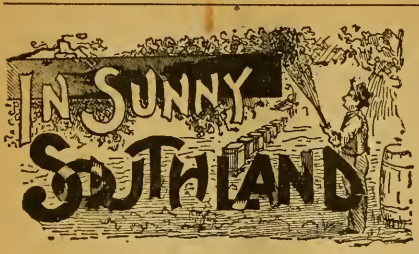
GEO. W. YORK & CO.

Gentlemen:—My office was destroyed by fire the first of this month. I lost all back numbers and file of the *Progressive Bee-Keeper* for 1892, and nearly all my exchanges for about three years back. I lost considerable other stock besides my books and papers. The subscription book was saved. One large frame building and 100 feet frontage of brick was burned. I had no insurance.

Yours truly,

E. F. QUIGLEY.

It does not pay to be without insurance of property. It costs but a trifle compared with the help that the insurance money would be to one who has been burned out. Always be sure your property is insured.



CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Apiarian Ignorance, Reports, Etc.

What few bee-keepers that are here, are ignorant of the management of bees, and they think they know it all. If you talk to them about rearing bees, they want to know how long the "king-bee" lives. Last summer they took all the honey their bees had, and now they have no honey nor bees, and then they say that Texas is "no good" for bees. *I* say Texas is a good land for bees and honey, and almost everything else.

EDWIN COOK.

Tioga, Tex., Sept. 3, 1892.

Friends, send me your reports, let them be good or bad, with bits of bee-news, short articles, or anything that you think would likely interest our readers, as Mr. Cook has done above, and I will appreciate them. If you do not let us know that you keep bees, how many colonies you have, who you are, and where you are, how much honey you are getting, what you get for it, etc., why, we will not know that you are a bee-keeper, and our statistics will leave you out. Now, do not neglect this, and let us make our department interesting.

Please remember that it makes the printer or typesetter "put up his lip" if we write on both sides of the paper; for the typesetter usually has a copy-holder which clamps the paper at the top, and as soon as the top sheet is used, he can turn the leaf right over, and not take it out of the holder; and the under side would be upside down if written on both sides, and he would have to take it out and turn it over, which takes too much time.

Twenty pounds of honey is plenty to winter any colony of bees in the South; but if the spring is unfavorable, you may need that much more to "spring" them over. It is our cool, wet, backward springs that hurt us here.

Trouble with Laying Workers.

I transferred a colony of bees a few days ago that was queenless, and I found from one to eleven eggs in every drone-cell, and no eggs or brood in the worker-comb. What was the matter with them?

EDWIN COOK.

Tioga, Tex., Sept. 3, 1892.

Friend Cook, your bees or hive was infested with laying workers, called "fertile workers." But, as worker-bees are never fertilized, the right name is "laying workers." This seems to take place when a colony becomes hopelessly queenless, or when they have no eggs or larvæ to rear a queen from. By the way, friends, did any of you ever notice a colony with laying workers, where there were hatched drones with them at the time they were queenless?

Some bees are very quick to take laying workers. I have known the Cyprian bees to have workers laying in 48 hours after their queen was taken away. The old three and five banded Italian bees, I think, are slower to take laying workers than other races. Bees having laying workers are harder to get to accept a queen than others; but, when you succeed in giving them a queen, the laying workers soon give way.

Southern Bee-Keepers, don't forget about the bee-meeting at the Dallas, Tex., Fair, on Oct. 27th. A grand time is expected.

Bee-Scouts Selecting a Home.

I have noticed several articles in the BEE JOURNAL on scouts selecting a home for the swarm before it issues from the old hive. As I have had an interesting case of that kind, I will give you the details.

Three years ago, when I lived in timber regions, I hived a fine swarm, and they appeared to be entirely satisfied with the new hive. One of my neighbors, who lived ¼ mile from where my bees were, came one day and stated that he was somewhat of a "beeist" himself, as he had found bees working in a hollow tree in his yard, and wanted me to advise him as to when the moon would be right to cut it, and save the bees!

The next day, about 10 o'clock, my new swarm, from some unknown cause, became dissatisfied with the new state of affairs, and all bundled up to hunt

pastures new. They went in the direction of my neighbor, who had the bee-tree in his yard. In a few minutes the whole neighborhood was disturbed by the most terrific beating and rattling of bells and tin pans that I have ever had the misfortune to listen to. I knew by this outrageous racket that my bees had gone to his house, and that everything on the place was producing all the racket it could, in order to settle them.

But as I had the queen's wings clipped, the bees were not gone long before they returned to the hive where I had the queen caged by this time, and placed on the frames. They quickly entered, and all seemed to be contented until the next day about 10 o'clock they again came out, and went to my neighbor's tree, and went into the tree, but soon returned to the hive where the queen was left.

These proceedings were repeated for several days, until finally one day, according to my friend's opinion, the "moon got right," and the tree was cut. But to his great sorrow there was not a dozen bees in the tree. However, the cutting settled the trouble; the bees all returned to the hive, and soon filled it full of comb and honey.

I am happy to say that myself and the rest of my neighbors soon recovered from the awful shock caused by the atrocious beating and rattling of the tinware.

C. B. BANKSTON.

Thorndale, Texas.

Friend B., don't you think you ought to have given your neighbor that swarm of bees?

Colonies Visiting Each Other.

I claim that my apiary is the original "Red, White and Blue" in the State of Texas, and probably in the United States. My hives are all numbered. I was looking through my apiary one morning recently, and my attention was drawn to quite a number of bees crawling from No. 25 into No. 26. My curiosity was so excited that I sat down and looked at their actions for quite awhile, but I failed to solve the (to me) mystery. I looked at them several times during the day, and the same actions were being carried on. Each colony was strong, and was working with a vim, carrying in honey and pollen.

A week has now passed by, and the same actions are going on, but more strongly in the morning. I opened both hives, and apparently all was right. Each colony appeared to be storing honey. This is something new and strange to me. If they pass from No. 26 to 25, they go on the wing and crawl back. My hives are about 12 inches apart.

LATER.—I now suspect robbing, but if so the mystery is not yet solved, as both colonies are strong, and No. 25 makes no resistance whatever, but submits quietly as though they were helpless. I will keep watch of this curious freak, and try to find out all I can, and report. They may be crazy, for ought I know. This is central Texas, and the thermometer has been 102° in the shade. I noticed the bees standing on their heads and fanning their wings for dear life.

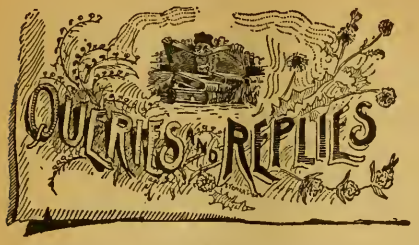
J. C. BELL.

Holland, Tex., Sept. 20, 1892.

Friend Bell, your hives are too close together. The bees have become just about the same as one colony. They may carry the honey from one hive to the other. I have often found one of the colonies broken up entirely where two were so close together that the bees could "neighbor" by crawling from one to the other. Try your hives farther apart, and all will be well.

At the Dallas Fair, in Texas, on Oct. 27th, a great bee-meeting will be held for Southern bee-keepers. Don't fail to be there.

He Uses Printers' Ink.—Wm. L. Douglass, whose countenance is seen in his advertisement in so many periodicals, has built up his extensive business almost wholly through liberal and persistent advertising. His first year of advertising was a trifle, comparatively, the Boston *Herald* getting $90 in 1883. Since then he has increased it to $100,000, and the year ending with July 1st, 1893, it will be $150,000. When he first commenced to advertise, his business was $450,000; this year it will be $1,750,000. This is the shoe business which he has built up since 1883. We mention these facts as a lesson to merchants on advertising as the source of success. With the means used and the accompanying business sagacity, this success should be expected. The readers of this in like manner may secure it!



Whose are the Bees and Honey in Bee-Trees?

Query 841.—1. If I buy a woodland on which is a bee-tree containing a lot of honey and bees, unbeknown to me, has anybody the right, who finds them, to claim the bees and honey? 2. If he has, and I put a sign up, "No Trespassing Allowed," would he then, under those conditions, have the right? I am no lawyer, but have had quite an argument over this question.—P. R. O.

I should say he had no right.—J. P. H. BROWN.

Look for Mr. R. L. Taylor's answer. I think he can solve this question.—H. D. CUTTING.

1. No. 2. In any case he is a trespasser to cut a tree on your land, or to remove anything from it.—M. MAHIN.

What the law would allow in such a case I don't know; but custom of the place will rule in most places.—E. FRANCE.

That's outside my experience, but a Nebraska J. P. tells me he can take the honey in any case if he does not injure the tree.—C. C. MILLER.

We think, *legally*, no one has any right to the bees except the owner of the land. As to *custom*, it is another thing.—DADANT & SON.

1. No, sir! You buy the bees, honey and all, just as much as the trees on the land. 2. He would have no right in law to trespass on your enclosed land, with or without such sign.—C. H. DIBBERN.

No; and it is my opinion that the owner of the land does not need to put any sign up in order to hold what he has bought. "No trespassing" in Ohio is addressed to squirrel hunters and the like.—G. L. TINKER.

Go with the man and help him cut the tree, and have a little fun. This is far better than having a quarrel over the matter. The rule (I don't say law) here is, that the man who finds the bee-tree has a right to the bees and honey; but he has no right to cut the tree without the owner's consent.—G. M. DOOLITTLE.

1. Yes, he may claim them, but he has no right to go upon your land, nor to cut the tree without your permission. 2. Your sign would not affect the matter—trespassing is never lawful, sign or no sign.—R. L. TAYLOR.

The finder owns the bees and honey, but he must get them without injuring your tree, else he is liable to damages. I should say, shake hands, join interests, and after the honey is secured, have a mutual sweetening up.—A. J. COOK.

1. It may depend upon the statute of the State where the land is located. In Iowa, I think a person removing the bees or honey without permission of the owner of the land, would be a trespasser, whether a sign were up or not.—EUGENE SECOR.

No; the bees and honey are yours—the same as fruit, such as grapes, mulberries, or wild plums would be; and persons cutting bee-trees, or trees in which squirrels or 'coons had a home, could be prosecuted for trespass.—MRS. L. HARRISON.

1. No one has a right to trespass on another's land for bees or anything else. The bees, though, are common property until reduced to possession. 2. No one but an owner of land has any business putting up notices forbidding trespassing.—J. E. POND.

When you buy realty, and no reservations are made, you own everything connected therewith that had been in the lawful possession of the former owner. Laws differ somewhat in the different States. Consult some good attorney near you, stating the facts as they exist in your particular case.—MRS. J. N. HEATER.

Certainly, the bees, combs and honey belong to the discoverer under the common law of treasuretrove. The land and tree are yours, but you cannot cut the tree without first notifying the bee-owner, nor can he cut your tree without your consent. Each has rights which the other is bound to respect.—JAMES HEDDON.

I am not a lawyer, and therefore cannot answer with any degree of positiveness. But there is in most localities an

unwritten law giving the finder the bees found, though I presume it would do no harm to ask permission of the owner, if it necessitated cutting down the tree. If a "no trespass" sign was put up, no party or parties would have such privilege. But this is not usual.—W. M. BARNUM.

I think that the laws of our State (Texas) give the party finding a bee-tree on another's land, the right to take the bees and honey as his property, regardless of the landholder's rights. But, should the landholder object to cutting the tree, you must get your bees and honey without felling it. But I am a poor lawyer.—MRS. JENNIE ATCHLEY.

1. When you purchase land the trees pass as part of the appurtenances appertaining to the land. This covers the whole case. For any person to go on to the premises of another, and "fell his timber," without the owner's consent, cannot be justified by any law in existence. 2. The mere finding of bees and honey in a tree standing on another man's land, gives no *right* in law, or otherwise, to the finder, because he cannot come into possession of the bees and honey lawfully, without the consent of the owner of the tree.—G. W. DEMAREE.

He would have a right to the bees, and, I presume, to their products. He would be liable to you for any damage he might do to you in removing them. If he went on your premises without your permission, it would be trespass; but I doubt if any jury would allow you very heavy damages, unless he cut down a valuable tree, or otherwise injured you materially. This is a matter to be regulated by statute. The Illinois statutes provide that whoever wilfully cuts down a tree growing on the land of another, without the consent of the owner, may be fined and imprisoned.—JAMES A. GREEN.

Every Boy and Girl will be interested in reading page 519 of this issue of the BEE JOURNAL. And we shouldn't wonder if the older folks, also, would be much pleased. We offer the BEE JOURNAL from now to Jan. 1, 1894, for $1.00, to a new subscriber, and give the "World's Fair Combined Games and Puzzles" as premium for getting such new subscriber. Or, we club it with the BEE JOURNAL for one year for $1.20.

New Races of Bees—Are They an Improvement?

Written for the American Bee Journal

BY HON. EUGENE SECOR.

The bee-keepers of this country want every new thing in their line that is desirable. This is evidenced by the alacrity with which they take hold of every new invention, contrivance or aid which promises a greater yield of honey with less labor.

The success which followed the introduction of the Italian bee into the United States, excited the hope that somewhere on the globe there were other races which would excel them in all the desirable qualities that made them general favorites.

The earth has been ransacked to find the "coming bee." The arrival of every new foreigner bearing the title *Apis Mellifica*, is hailed with interest, and the claim is usually made by some enthusiast that she is to supplant all her rivals. The claim has never yet been realized. In this case we seem to have "adopted" the proper child in the first instance. I believe it has come to be generally accepted by the "old guard" (by which I mean the bee-keepers of experience, who get substantial results from their labor), that the only desirable bee that has yet been introduced in America is the Italian. So general is this feeling that few of the experienced honey-producers can be induced to invest in any new race, except it may be in a very limited and cautious way.

So far as I am able to judge, the Syrians, the Cyprians, the Carniolans, and the so-called Punics are each and all considered of little or no value in the way of improving our stock. As curiosities to be exhibited at Fairs, some of these are of some interest, but to the bee-keeper who is interested only in the production of honey, they have not commended themselves by their performances.

We have heard a great deal about *Apis Dorsata*—the bee of Java. I would like to see an importation made under the auspices of the Government for examination and trial, but I have no hope that they will prove an acquisition. Any race of bees that can build its combs in the open air, and successfully defend its stores against the depredations of native enemies, will, it seems to me, possess a temper that will need to be cultivated and mollified for the next hundred years, before it would be a desirable resident.

I am, therefore, of the opinion that we must look to the native blacks and Italians, and their crosses, for the ideal bee for this country. I believe that by careful breeding we shall evolve a bee superior to anything yet known. If in the last forty years the horse has increased in speed from 2:40 to 2:04, and the increased milking capacity of our dairy breeds of cattle has almost taxed our credulity, who shall say that by selection and careful breeding a bee may not be developed that will surpass by far, in docility and honey-gathering capabilities, the best records of to-day?

Forest City, Iowa.

The Keeping of Bees for Profit and Pleasure.

BY G. M. DOOLITTLE.

That bee-keeping will compare favorably with any other pursuit in life, I firmly believe; and the trouble why so many fail in it is that they do not properly attend to it. Men will give their horses and cattle the best of care, but when it comes to the bees, they let them take care of themselves, with the exception of hiving swarms and putting on and taking off boxes. In this way there is no profit, and little, if any, pleasure in apiculture. What would they expect from their cows if treated in that way?

The keeping of cows means milking twice a day for at least 210 days out of the year, and feeding them three times a day for 180 days, saying nothing about cleaning stables and other work necessary to carry on a dairy. When men are willing to thus care for bees, they will find they will give as much profit as can be obtained from cows, or any other branch of rural industry, and in this profit comes very largely the pleasure side of the question.

Bee-keeping means work, with enthusiasm enough put into it to make this work real fun; a place for everything and everything in its place, and to know how to do things just at the right time and in the right place, if we would make it both pleasurable and profitable.

We also want the best bees, the best hives, and all modern appliances, just as our enterprising dairymen would have the best breed of cows and the best utensils to care for the milk. Also a man must have a liking for the business. No man will ever make bee-keeping profitable who prefers to lounge around a country tavern or store instead of working in the apiary. In fact, a person will not succeed in any business unless he has enough love for his calling in life so he will be diligent and faithful thereto. "Seest thou a man diligent in his business? he shall stand before kings," was what King Solomon told his son, and the saying is as true to-day as it ever was.

Again, to be successful in any business, a man must "grow up" into it by years of patient toil and study, till he becomes master of that business, when in 99 cases out of 100 he will succeed. It is this getting crazy over a business which looks to be a good thing, but with which we are not acquainted, and investing all we have in it, expecting to make a fortune, which ruins so many and gives no pleasure as a result.

In the winter of 1868-69, I became interested in bees by reading the first edition of "King's Bee-Keeper's Text Book," which chanced to fall into my hands. Next I subscribed for a bee-paper, read Quinby's and Langstroth's books, and in March bought two colonies of bees, and the hives I needed for two years, paying $30. 1869, being a poor year, I had but one swarm from the two, and had to feed $5 worth of sugar to get through the winter. In 1870, I received enough from them to buy all the fixtures I wished for 1871, and a little to help on my other expenses from the farm.

So I kept on making the bees pay their way, as I had resolved at the outset, that after paying the first $35 I would lay out no more money on them than they brought in, believing that if I could not make two colonies pay I could not 200.

In the fall of 1873, I found I had an average yield of 80 pounds of comb honey from each colony I had in the spring, which was sold so as to give me $559 free of all expense incurred by the bees. I also bought an extractor that season.

As I was determined to give the bees

the care they needed, and knowing that the time the bees needed the most care came in haying-time, I hired a man to take my place in the hayfield. It so happened that he commenced work on the day basswood (one of our best honey-producing trees) opened. Previously I had hived a single swarm in an empty hive and concluded to devote them to extracted honey.

The man worked 16 days at $1.75 per day, and I extracted, during those 16 days, honey enough from this swarm to pay the man for his work. I state this to show that one new swarm of bees was equivalent to myself in the hayfield; yet how many keeping from 30 to 50 colonies of bees leave them to go into the hay and harvest field, and then tell us bee-keeping is not profitable? You can hire a man to take your place in the field, but if you expect to become master of the bee-business, so as to make it pay, you cannot hire a man to take your place in the apiary during the honey season.

But to return: In 1874, my honey was sold so as to bring $970 free of all expenses. At this time I began to think of giving up the farm, but finally concluded to hold on to it one year more. After deducting the expenses of the bees from the sales, I found I had the next year (1875) the amount of $1,431, and hesitated no longer, but gave up farming and embarked in the bee-business as an occupation.

Without going into further detail I find that after deducting all expenses except my time, I have $17,982 as the sum total for 18 years of bee-keeping, since they began to more than pay their way; keeping on an average only 50 colonies, spring count, each year. This will give me a salary of $999 a year, as will be conceded by all.

But what about the first four years during which I was experimenting, reading and thinking about bees all my wakeful hours, many of them hours when I ought to have been asleep, giving the subject as much or more study than any lawyer ever spent on his profession? To be sure the bees paid their way, but to what shall I look for my pay? To be just I must divide my $17,982 by 22 years, which gives me about $817 a year as the real pay I received for my labor. Is this enough pay for the labor performed? Well, many would not be satisfied with it, and multitudes would be glad to receive such a salary.

One of the largest honey-producers of our State, once said to me, "that a man who was capable of successfully managing such an apiary would command $1,000 salary a year in any business." If we accept this statement as a fact, then I should have been better off in this world's goods if I had never kept bees. But when I turn my eyes to the thousands who do not get one-half $817 a year, working in factories, in the shop, on the farm, and doing drudgery of all kinds and descriptions, I turn my eyes back with pleasure to this fascinating and health-giving pursuit—bee-keeping—and say: It is enough; I am satisfied.

In conclusion, let me say, if a person is not willing to spend the time on the bees which they require, he had better keep out of the business, for sooner or later he will turn from it in disgust, if it is undertaken with the idea that "bees work for nothing and board themselves."
—*N. Y. Voice.*

Borodino, N. Y.

Overhauling the Bees, Queen-Rearing, Honey-Prophets.

Written for the American Bee Journal

BY A. N. DRAPER.

Mr. A. Emmons, of Greenfield, Ills., is here making me a little visit. We have been overhauling the bees somewhat this afternoon, and I find that they have considerably more honey than I expected to find. Also, there is considerable brood in the hives, but there is not nearly as many bees in the hives as there was last year at this time. As he is intending to stay several days, we will overhaul the out-apiaries.

I did not move my bees to the lake this fall to secure the crop of Spanish-needle honey; as I was very busy at the time it ought to have been done with other work that I could not put off.

DOOLITTLE QUEEN-CELL CUPS.

I have put in a good deal of time this summer rearing queens. Almost every queen that I have in my apiaries now, has been reared in the "Doolittle queen-cell cups." I think, perhaps, that this accounts for so much brood this late in the season. I have taken a good deal of pains in making my queen-cell cups, to select nice, light-colored wax. Then, another thing that has contributed to light-colored queens has been in selecting combs of brood that were light-colored, to lift into the upper stories. That is, I would select combs that had brood in them for the first time to place

next to the frame containing the cell-cups.

I think it was in the last week of May and during the first week of June that we had our spring crop of honey here. But it was too good to last long—a week or ten days, and it was over. The weather and atmosphere were wrong, some way.

TWO APIARIAN PROPHETS NOW.

I was one of the prophets, too, as will be seen by referring to some of the back numbers of the AMERICAN BEE JOURNAL. As Mr. Wilson says on page 407, the crop would have been good had the weather been favorable. Mr. Sam Wilson has been a true prophet, as he has endorsed my predictions every time, and I rather think that next year is going to be a good season for honey, in this neighborhood, at least, judging from present indications, as white clover is very abundant.

I rather think that Mr. Wilson has given a good deal of proof that he knows something about predicting about the future crop, but I think he undertakes too much. He ought to be satisfied in predicting for his own neighborhood. I think he is liable to predict a big honey-flow from white clover where there is none growing, unless he is a little careful. I do not think, however, that he is going to be put down as a "false prophet," simply because he does not give his reasons for his conclusions, as mentioned on page 407.

Upper Alton, Ills., Oct. 1, 1892.

Shall Queens' Wings be Clipped, or Not?

Written for the American Bee Journal

BY M. H. DE WITT.

At one time I was strongly in favor of clipping the wings of all my queens, just as soon as they were found laying. As they often got out in the grass during swarming time, and were lost, when they would probably have been saved if they would have had their wings, I afterward concluded that I did not want the wings of my queens clipped. In selling queens, since then, very many of them have flown away while being introduced, and I have begun to decide that clipping them is perhaps the lesser of the two evils.

To prevent them from flying, it has been suggested that they be daubed with honey, which the bees will soon lick off; this did very well until some one reported a queen that had to be re-caged. The honey dried on her body, and killed her.

It has also been a query as to whether a laying queen ever leaves the hive for a second fertilization. The facts indicate very strongly that imported queens, and others that have been a long time confined so that they cannot lay, sometimes do this. Clipping will certainly prevent this, although it may result in the loss of the queen. I think I would prefer the chance of loss, rather than that of a tested queen turning a hybrid, but I dislike the idea of clipping a queen just before starting her off on a journey.

To make it sure that there can be no flying, I would clip the greater part of both large wings; the small wings being perfect, although smaller, will give her a symmetrical appearance, while cutting off both wings on one side always makes her look ever afterward very much like a cripple. If a queen is ever so fine, few people can see her beauty when she has two long wings on one side and none on the other.

HOW TO CLIP THE QUEEN'S WINGS.

For clipping a queen's wings, you will want a pair of embroidery scissors. They must be just as keen and sharp at the points as they can be made; for it will never do to have the wings of a valuable queen double up, or catch so as to frighten her out of her senses. With good scissors you can lift a wing and clip it off almost without her knowing it; but where two are to be clipped, open the hive and hunt the frame that the queen is on, get the scissors ready, and follow her about over the combs, and when you get a chance, clip her wings while she is walking leisurely about over the combs. But the operation is the most trying to the nerves of any that I ever did, and I would not advise beginners to practice it.

Because my queens must be clipped, I had to find a better way; and how many queens have been injured by handling, nobody knows. I like to know that mine are not thus injured, because absolutely untouched. I set a small wire cage over the queen on the comb; when she runs up into it (she will sooner run up into a small cage than a large one), I lift it, pick off two or three bees by the wings, and put in for company, carry them into the house, and let them loose on a clean window. She can be clipped here better than on the comb; but after

allowing them to run awhile, guide them near each other, and the bees will feed the queen, when the work can be easily done.

I have since found out a more expeditious way, viz.: While the queen is passing from the cage to the window, let her back her wing gently, brush a drop of honey on the end of the finger, and she will soon stop to clean it off.

To clip her so she will not fly afterwards, I always cut off the large wing on only one side, just deep enough to take the tip of the small one in the same clip—she never flies again. It wounds her but little, as I give a slanting cut, taking more of the lace than of the fleshy part. Set the cage over her as before, carry her to the hive at once, and let her run down among the combs at once; not in at the entrance.

If all the mum old bee-keepers have known all about this, all these years of progressive bee-culture, and not told it, I will make it known through the old reliable AMERICAN BEE JOURNAL, as it may help some beginner out, as well as the more advanced.

Sang Run, Md.

Feeders for Feeding Dry Sugar to Bees Described.

Written for the American Bee Journal
BY "MALTA."

There are a great many patterns of dry-sugar feeders made and sold by English firms, and I think a description of one is to be found in Simmins' book.

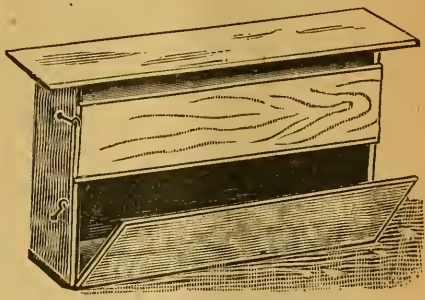
Mr. Anderson (see page 246) must have misunderstood my article. I only advocate dry sugar as a useful means of tiding over a bad time, not for supplying winter stores. My plan was as follows:

Instead of the ordinary solid dummy or division-board, I made a hollow one about 2 inches through, divided horizontally across the middle—the back was entirely closed; the front was partially so, by means of two smaller boards hingeing on their lower edges, and not quite reaching to the top of their respective partitions, leaving an opening through which the bees had access to the sugar placed inside.

At first I used an ordinary frame, without central partition, and the front fixed, but found that the sugar caked, and it was not easy to clean out, so I adopted the divided and hinged pattern in lieu of the narrow, deep frame, and could then stir up and freshen up the feed in a few seconds. I append a rough sketch in which the upper partition is closed as for use, and the lower open for cleaning—it is not drawn to scale.

Should it be impossible, on account of make of hives, to use a feeding dummy of this sort, an ordinary float-feeder with the float removed can be used for sugar on top of the frames. Messrs. Neighbour, of London, make a feeder called the "Bunce field Easternware Sugar Feeder," in which the sugar gets wetted by water oozing through a porous division in just such quantities as the bees require, and so saves the dirty and troublesome job of handling syrup.

A friend of mine, who is a queen-rearer, always uses dry-sugar feeders in



Wide-Frame Bee-Feeder.

his nuclei, much of the pattern I have described, and I believe that in storifying, if the bees don't care to build out the combs up-stairs, a feeder of this sort will often induce them to do so in its vicinity.

One caution—*ware wasps*—those pests will find and go for dry sugar like mad things, even passing honey by for it.

Panama.

Uninspired Apiarian Prophecies for the State of Iowa.

Written for the American Bee Journal
BY THOS. JOHNSON.

On page 406, the Tennessee honey prophet writes that the east part of this State would have a better honey-flow than the west. Mr. Wilson wrote me a personal letter some time in July, which I answered July 18th, in the BEE JOURNAL. This letter he takes exceptions to. Does he not know that the western part of Iowa, on an average, has more than double the flow of honey that the eastern part has?

He speaks of "Frank Coverdale some years ago having 40 pounds to the colony, and according to Mr. Johnson did not get one-third of a crop." Mr. Wilson would better have waited until the season closed before he estimated my income. I have colonies from each of which I have taken 192 completed sections of honey since July 1, 1892. And still I have not one-third of a crop! Will Mr. Wilson multiply 192 by 3, then ask Mr. Coverdale if he ever got that amount of honey from one colony in one year?

I had the honor to meet Mr. Coverdale at the Iowa State Fair this year, where I exhibited honey and bees, and he can tell what kind of an article the honey was, compared with the eastern Iowa product of 1892. If nothing prevents, I will exhibit a part of my honey at the World's Fair in 1893.

True, Mr. Wilson hit it pretty well in 1891, in his predictions, and he tried to imitate the same in 1892, but failed. He wrote me that he wanted me to *prove* him a "false prophet." Well, if I did not prove it, the honey-flow did, and I could not help stating so, as well as others.

Mr. Wilson says that if the weather had been favorable, there would have been double the amount of honey this year. Well, multiply 192 by 2, then that amount by 3, which would give an average of Mr. Coverdale's honey-flow.

Just as nearly as he can tell six months ahead how much honey we will have in Iowa, his prediction might come true; and he might foretell six months ahead; but if he had reversed it in Iowa, and prophesied in the eastern part "not an average," and for the western part "a fair honey crop," then we "Hawkeyes" could say that he knew something about it; but as he did not thus prophesy, we could not help saying what we have said.

Coon Rapids, Iowa.

Importance of Wholesome Stores for Wintering.

Written for the American Bee Journal

BY FRANK COVERDALE.

Much space has been occupied not only in the bee-papers, but in the leading agricultural press, and perhaps not a bee-convention was ever assembled without discussing the subject of wintering our bees; but for all this, not less than three-fourths of the bees in this section perished the past winter—a thing which, in my estimation, need not have thus happened.

Honey-dew was the greater enemy which caused many of the bees to die early in winter, and those that survived until spring were in very poor condition to stand the cool, rainy, backward spring. How much different might the condition of these colonies have been, if the extractor had been put to work just as the fall bloom began to yield nectar, and it would not have been much of a task. At that date robber bees would have annoyed but little, and the bees would have gathered well-nigh enough to winter on, which, in this locality, makes the best of winter stores; and were there any deficient, a syrup made from granulated sugar would do very well.

The last winter's losses should be a lesson to many which they should never forget and a most plain illustration it was of the value of good food for bees in winter. Honey-dew is not fit for food, and should never be tolerated as a winter ration for bees in this latitude. Well ripened honey, and plenty of it, in this location, cannot be excelled.

Let no one risk bees in a damp cellar, unless the temperature runs high at all times, 45° to 50°, when damp, while a dry cellar may do very well even if the temperature runs down to 32° at times; and I feel quite confident that with a dry cellar, the temperature ranging from 40° to 50°, and 55° in the last days in March, has failed to do my bees any harm, that I have been able to note.

A bee-cellar should be dug on the highest place possible, and the walls extend high enough above ground to allow scraping in dirt all around the wall, making the ground all slant well from the cellar; and as years roll on the cellar will continually become drier, as the rain will all run rapidly away before it soaks.

With all of the above good points no one need fear any very bad results. My bees have been wintered in just such a cellar for eight winters, without any loss worth speaking of, while seven years previous to this I had a damp cellar to contend with, which so reduced my bees that I was forced to abandon it.

Good, wholesome stores may be much injured by allowing frost to enter the inside of the hives before moving them to the cellar. It is oftimes said by the average bee-man, that the bees will fix all the damage, and have a late cleansing flight. The damage will remain, to

a degree, and the late flight does no good that I have been able to note. In short, the harm done overbalances any good which may be derived from this plan.

Welton, Iowa.

Why Bee-Keeping is so Well Adapted to Women.

BY CARRIE L. SWIGART.

Among the insects, bees stand first, in the variety of the useful products which they give us, and next to the silk-moth in the importance of these products. True, there are other insects that are of great value—from the lac-insect we obtain an important element of glue, namely shellac; the blister beetle affords an article prized by physicians; while we are indebted to the gall-flies for a valuable element of ink. But the honey-bee affords not only a delicious article of food, but also another article of great importance, namely, wax.

Of course, the first product of bees, is honey, and what is honey? We can only say it is a sweet substance, gathered from flowers and other sources, by bees; its chemical composition is as varied as the source from which it comes. It is composed of various sugars, and this is as easy to understand why honey varies so much in richness, color, flavor and effects on digestion. Apiculture is a vocation, which to be successful, requires observation, caution, promptness and immediate attention.

The amount of time required will of course vary with the number of colonies kept, but with proper management, they will not interfere with other duties; thus residents of country, village or city, who wish to add to their income and pleasure will find here an ever-waiting opportunity. To those individuals, the nature of whose business precludes air and exercise, bee-keeping cannot be too highly recommended. There are a few people whose system seems to be specially susceptible to the poison of bee's sting, but some soon become so inoculated with the poison, that they experience no serious injury, and it is a well-known fact that each successive sting is less powerful to work harm.

Among the attractive feature of apiculture, is the pleasure which it offers; bee-keeping affords a wholesome recreation and it is ever a delight to watch the workings and wondrous life-habits of the busy bee.

The profit too, of apiculture urges it as a pursuit, when we consider the small amount of capital invested, the small amount of labor and expense attending its operations and we are surprised at the abundant reward we are almost sure to reap.

One thing to be considered, is, that scientific bee-culture is an open field for women, as well as for men, and our opportunities for making discoveries are equal. By way of encouragement, Harriet Morse states that the being who has for generations split kindling wood with a case-knife, driven nails with a stove-hook, and defended herself with a broom-stick, may be relied upon to find a way to capture the most inconsiderate swarm that ever settled on a tree or post; and if we compete with our brothers in teaching school, or any other employment, we are imagined decidedly out of place in demanding as much pay as is commanded by men for the same work; but we have yet to hear of a crate of honey being shipped to any commission house at a discount because of its being produced by the management of a woman!

Now, I believe that bee-keeping is just one of those pursuits in which women can compete with man to advantage. The exertion required to lift full-sized hives was one objection against women becoming bee-keepers. That objection exists no longer. There is only a half-hive to lift when lifting is required, and by wintering bees out-of-doors, on a stand, the necessity of lifting or carrying hives is almost wholly done away with.

With no strain on the muscles demanded now, in what particular cannot women compete with men as bee-keepers? Their perceptive powers are keener than those of men, their patience and perseverance are greater, and these are the prime qualities demanded in an apiarist. It is said that a good surgeon must have a "lion's heart, an eagle's eye and a lady's hand;" so must a good bee-keeper.

There is much in bee-keeping that suits woman's cast of mind—in fact the whole manipulation demanded is of that gentle, quiet kind which harmonizes with woman's nature. With proper thought and management, work need never be done in the hot sunshine. But let me emphasize, that only those who will let energetic thought and persistence make up for physical weakness should become bee-keepers.

A stronger body and improved health

is the result of pure air, sunshine and exercise obtained with each successive day's labor in the apiary, and some of the most successfull apiarists in our country are women. Many of these were led to adopt this vocation as a means of restoring their health, and have been rewarded in finding not only pleasure and profit, but renewed vigor of body and mind in the labors and recreation of the apiary.—*Coming's Garden.*

Dixon, Ills.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Nov. 3.—Connecticut, at Hartford, Conn.
Mrs. W. E. Riley, Sec., Waterbury, Conn.

Nov. 28.—Allegany Co., at Angelica, N. Y.
H. L. Dwight, Sec., Friendship, N. Y.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel,Wis.
Edwin Pike, Pres., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor.,Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 520,there .s no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present

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☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Nesting Fowls Near the Bees.

I have a large, valuable watch-dog that has one very bad fault—he will suck eggs. His mother had the same fault, for which I had her killed. I tried many ways to break up this habit of his, but with little success.

I noticed that the dog was very much afraid of bees, and will never go near a bee-hive. So I conceived the idea of making nests of some of my fowls close along side of some of the bee-hives. Chickens, turkeys, and Guinea fowls took kindly to the arrangement; and I have no doubt the dog knows of these nest, but his fear of the bees will not permit him to go near them.

Now, why are these nests so readily adopted. If you watch a hen approaching her nest, you will see how very quietly and slowly she approaches it. She almost glides into it like the progress of a shadow. The result of such movements will not attract the attention of the bees, and the hen is allowed to approach her nest without molestation. I likewise believe that these nests are accepted with some instinctive idea of their safety.

G. P. HACHENBERG, M. D.
Austin, Texas.

Turning Wheat to Chess—Challenge.

I have just read Rev. W. P. Faylor's article on page 431. Passing by all his mythical guessing until we come to his assertion "that wheat will turn to chess is evident," I will make this proposition: If he will, under proper supervision, demonstrate the fact, I will pay him, as a reward for his valuable addition to scientific knowledge, the sum of $25.

This being the proper season of the year to begin the experiment, and that

no time be lost, I will suggest that he go to the Agricultural Experiment Station at Ames, Iowa, and make the experiment under the supervision of Professors James Wilson, C. F. Curtis and L. H. Pammel, and I will accept their decision in the matter, and pay over the money whenever they have decided that Mr. Faylor has demonstrated his position.

In order that there may be no hesitancy on the part of Mr. Faylor, I will execute a bond with three of the best men of Centerville, as surety, for the faithful fulfilment of my part of the contract, whenever Mr. Faylor produces satisfactory evidence, on his part, that he will proceed with the demonstration.

G. B. REPLOGLE.

Centreville, Iowa, Oct. 3, 1892.

Introducing Queens.

My best way of introducing queens is thus :

Put the queen into a cage of perforated zinc, and leave it on top of cloth with a hole in it at one corner, turned back so the bees can come to the queen, and watch that if she is not balled, which very seldom happens. The bees will feed the queen, and after a day, let them out, and they will find their way down below. JAS. R. BELLAMY.

Black Bank, Ont.

Drones and their Importance, Etc.

The Rev. W. P. Faylor's comment upon drones as useful insects is very good. I have not discovered that they were any use in a colony of bees, only to fertilize the queen, and to show the apiarist that the colony is not short of honey; for the bees will tell you themselves that they have no use for drones after swarming ceases, as it is shown that they run them out of the hive, and cause them to lie outside of the hive, not wanting their heat or company. One of the most profound apiarists of Illinois (and that is Mr. Dadant), says that drones will consume about a dollar's worth of honey to the hive, and I would rather believe that than to believe they would produce that much by their presence in the hive. I have a Hamburg chicken that eats them, and is getting "drone-fat." The bees now are killing off the drones, and my poor Hamburg, I am afraid, will starve for want of drones this winter. GEO. POINDEXTER.

Kenney, Ills., Sept. 29, 1892.

Helpful Though Unconscious Service.

MARGARET J. PRESTON.

"The bee"—she sighed—"that haunts the clover,
Has Nature's errand to fulfill ;
The bird that skims the azure over
Bears living seeds within his bill :

"Without a pause his flight pursuing,
He drops them on a barren strand,
And turns, unconscious of the doing,
The waste into a pasture land.

"I, craving service—willing, choosing
To fling broadcast some golden grain—
Can only sit in silent musing
And weave my litanies of pain."

I, making answer, softly kissed her :
"All Nature's realm of bees and birds—
What is such ministry, my sister,
Compared with your enchanted words ?

"The seed your weakened hand is sowing
May ripen to a harvest broad,
Which yet may help, without your knowing,
To fill the granaries of God !"

—Lippincott's.

The Use of Old Combs.

We have usually discouraged the use of full-drawn combs, especially if somewhat soiled in section-boxes, as such will seldom produce first-class honey, and are of doubtful economy at best. We have usually advocated to use all good brood-combs to hive swarms on. The past season, however, has somewhat shaken our faith in the wisdom of that policy. It is true that much depends on the season and the time that swarms are to be hived.

In June, during a good honey-flow, I am satisfied it would be more profitable to use only from one to three combs, and the balance of the frames filled with foundation. We would use full sheets, as the bees use entirely too much drone-comb, when starters only are used.

One objection to using hives full of combs is, that it gives too much room to be filled with honey, that should go into the sections; another is, that the bees, after traveling over the old combs, are apt to soil the honey in the sections. Of course if bees swarm late in the season, or when no honey is coming in, it is all right to use the old comb. Some judgment must be used in this matter, if we expect to achieve the best results.—C. H. DIBBERN, in *Western Plowman.*

When to Prepare the Sections.

The best time to put foundation starters into sections is in the morning, before you need them. The best time to give sections to your colonies is the minute they are ready for them and honey is coming in; but the best time to make up your sections is in the winter, when there is plenty of spare time. I use section-holders or broad frames, and handle the sections, after they are made up, in fours.—F. GREINER, in *Gleanings.*

Feeding for Winter—Late Drones.

We believe nearly every one feeds at a loss, by feeding each colony separate. We have done what little feeding we had to do by having a few strong colonies fill the combs and cap them over, removing them as soon as done, giving them to the colonies needing it.

By this method the bees were not stimulated at a time not desirable, and their stores lasted much longer, and for spring feeding this is much the best plan. You commence to feed a colony in the spring, and they will use the food up as fast as you give it to them, and if neglected for a few days, will starve; while you can hang in a comb of honey with very little disturbance to the colony.

The syrup used should be about as thick as honey, and poured in the feeder while warm—not too hot for the bees to handle. As to the kind of feeder to use, there are several good ones; it should be large, so as to hold a quantity. We used four to six Hill feeders on a colony. The Soper, Hastings and Miller feeders are good.

Some bee-keepers are troubled to keep their drones late in the season, so as to get some purely-mated queens, after other drones are gone. A drone's life is short, and those reared at swarming-time will die before fall. So, to have them after others are gone, you must get them hatched, say by the first of September.

Now, here is something you do not find in books about getting late drones, and that is, do not try to get a queen to lay drone-eggs in the fall that has furnished the colony with them early in the season. Take a young queen that has never laid any drone-eggs that season, and if you have a late honey-flow you will find plenty of drone-brood if there is any place to put them. In localities where there is no fall flow of honey, you will have to feed the colony regularly until the brood is capped over, then it should be placed in a strong queenless colony so they will preserve them.

By careful watching, most bee-keepers could save choice drones and rear queens enough for their own apiary, either between the summer and fall harvest, or after the fall crop is gathered. We feed our nuclei and drone colonies when our queens are old enough to mate, so as to have all flying at once, and lessen the chance of any mismating. —*Progressive Bee-Keeper.*

Humming-Bird and Bee Fight.

An observer writes that he is satisfied that there is just as much rivalry between humming birds and bees in their quest for honey as there is between members of the human race in their struggle for the good things of life, and describes a recent quarrel that he saw in a Portland garden, where a humming-bird with an angry dash expressed its disapproval of the presence of a big bumblebee in the same tree. The usually pugnacious bee incontinently fled, but did not leave the tree. It dashed back and forth among the branches and white blossoms, the humming-bird in close pursuit.

Where will you find another pair that could dodge and dart equal to these? They were like flashes of light, yet the pursuer followed the track of the pursued, turning when the bee turned. In short, the bird and the bee controlled the movements of their bodies more quickly and more accurately than it could control the movement of its eyes.

The chase was all over in half the time than it has taken to tell it, but the excitement of a pack of hounds after a fox was no greater. The bee escaped, the bird giving up the whole chase and alighting on a twig. It couldn't have been chasing the bee for food, and there is no possible explanation of its unprovoked attack, except that it wished to have all the honey itself.—*Selected.*

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Wallace Porter Dec92
Suffield, Portage co, Ohio

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Be Sure to read offer on page 517.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—To sell, good Apiary and Fixtures at Pattonsburg, Mo. Good location. Address, G. F. TUCKER,
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TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, October 15th, 1892 :

CHICAGO, Ill.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c,, according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, Ills.—No. 1 comb honey, 16@17 cts. White extracted, 7½@8c.; dark, 6½@7c.
Beeswax—24@25c. J. A. L.

CHICAGO, Ills.—Fancy white comb honey is selling at 17@18c.; second grade, 15@16c. Extracted honey, 7@8½c. Beeswax—26c. All the foregoing are scarce on our market, and in good demand. S. T. F. & C.

KANSAS CITY, Mo.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, Ohio.—Demand good for all kinds of extracted honey at 5½@8c., according to quality. Arrivals not equal to demand. We dare not solicit new trade. Comb honey is scarce, at 15@16c. for best white.
Beeswax—Demand fair, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

NEW YORK, N. Y.—Demand is moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c. F. G. S. & C.

SAN FRANCISCO, Calif.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, Mass. — Demand is light. White 1-lbs., 13@15c. No 2-lbs, on hand. No Beeswax on hand. Extracted, 7@8c. Demand is light for all. B. & R.

MINNEAPOLIS, Minn.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

KANSAS CITY, Mo.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, Minn.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

ALBANY, N. Y.—Demand good and receipts lighter than they will be later on. We think early sales best. We quote: White comb, 15@16c.; mixed, 13@14c. Buckwheat, 12@13c. Large and imperfect combs, and double glassed, etc., sell for less. Extracted, white, 8@8½c.; mixed, 7½@8c.; dark, 6@7c. Especial good demand for extracted this season.
Beeswax, 27@28c. H. R. W.

NEW YORK, N. Y.—Comb is arriving freely, and demand is good. Fancy white 1-lbs. 15@17c.; 2-lbs. 13@14c. Fair white 1-lbs., 13@14c.; 2-lbs. 12c. Buchwheat 1-lbs. 11@12 2-lbs. 10c. Extracted—clover, basswood, and orange bloom, 7½@8c. Southern, 65@75c. a gallon. Beeswax—26@27c. H. B. & S.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. Burnett, 161 South Water Street.
J. A. Lamon, 44 & 46 South Water Street.

New York, N. Y.

F. I. Sage & Son, 183 Reade Street.
Hildreth Bros. & Segelken, 28 & 30 West Broadway.

San Francisco, Calif.

Schacht, Lemcke & Steiner, 10 Drumm St.

Minneapolis, Minn.

Stewart & Elliott, 22 Bridge Square.
J. A. Shea & Co., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

Hamblin & Bearss, 514 Walnut Street.
Clemoms-Mason Com. Co., 521 Walnut St.

Albany, N. Y.

H. R. Wright, 326 & 328 Broadway.

Hamilton, Ills.

Chas. Dadant & Son.

Cincinnati, Ohio.

C. F. Muth & Son, cor. Freeman & Central avs.

Convention Notices.

CONNECTICUT.—The fall meeting of the Connecticut Bee-Keepers' Association will be held at the Capitol at Hartford, on Thursday, Nov. 3rd, 1892. Mrs. W. E. Riley, Sec.
Waterbury, Conn.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m. on Monday, Nov. 28, 1892. All bee-keepers are invited to attend.
Friendship, N. Y. H. L. Dwight, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. Edwin Pike, Pres.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., OCTOBER 27, 1892. NO. 18.

Flowers Fade, true friendship never;
Links of love no hand can sever,
Only words in kindness spoken
Rare and sweet rewards betoken.
Every life that loves its duty
Never loses grace or beauty.
Christian kindness blooms unending,
Evermore its fragrance lending.
—Christian Register.

Dr. Miller was unable to be present at the Illinois State Convention held last week, on account of illness. We don't see why a *doctor* should get sick, any way. But likely the Doctor "don't know," either.

Bro. Hutchinson, the genial, jovial and just editor of the *Review*, took the report of the Illinois State Convention last week for the BEE JOURNAL. We had a most delightful visit with him, as well as with many others of the prominent bee-keepers who were in attendance. Bro. H. just writes in shorthand whatever a person says in discussions. All he has to do, is to keep his eyes and ears open, and his pencil "does the rest."

The New Cover Design and department headings are appreciated by many of our readers, who have complimented us upon them and the improvement in the general appearance of the BEE JOURNAL. *Gleanings* for Oct. 15 has this to say about it, for which its editors will please accept our thanks:

The AMERICAN BEE JOURNAL has not only been renewing its youth by infusing into its editorial veins new and younger blood, but now it beams forth in a new dress, or, more exactly, a new cover design, and here and there through its pages novel and appropriate department headings. Even though the "old reliable" has lately exchanged ownership, it is bound somehow to show the delightful impress of a *new* man, be he old or young.

Winter Food for Bees.—Mrs. L. Harrison, in the *Prairie Farmer*, gives the following directions for making food for bees in winter:

Into 15 pounds of boiling water sift 30 pounds of granulated sugar, stirring constantly; when it is all in and boils, stir in 5 pounds of extracted honey. To prevent granulation, I have tried tartaric acid and vinegar, but it was not very satisfactory, as I have had syrup harden in the cells, so that even robbers could not get it out.

The Illinois State convention report is begun in this issue of the BEE JOURNAL on page 571. You should read it carefully, if you were unable to be present and hear the proceedings. We will likely finish the report next week.

A Bee-Smoker has been patented by Mr. Geo. W. Brodbeck, of California, dated Oct. 11, 1892. The number of the patent is 484,172. The object of the invention "is to produce a smoker of superior convenience and efficiency of operation, and which is interchangeably a hot and cold blast smoker."

After fully describing the smoker, Mr. B. says that the following is what he "claims as new:"

1. A bee-smoker provided with an air-chamber surrounding the fire-barrel and communicating with the blast-chamber at one end and with the smoke-nozzle at the other end, and a suitable damper arranged upon the end of the fire-barrel to prevent the passage of the blast through the fire-barrel, and to direct the blast through such air-chamber.

2. The combination, in a bee-smoker, of a suitable barrel provided near one end with a blast-opening, a suitable smoke-nozzel arranged at the opposite end of such barrel, suitable means for producing a blast through such blast-opening, and a forwardly-inclined blast deflector extending from the rear of the blast-opening upward across and obliquely transverse to the plane of such opening to deflect the blast forward through the barrel and nozzle.

3. In a bee-smoker, the combination of a detachable blast-chamber provided with a blast-opening, the bellows, and a blast-tube connecting such bellows with such blast-chamber, and provided upon one side with an air-ingress opening communicating with the exterior air, and arranged to be advanced into or retracted from the blast-opening in the blast-chamber.

4 A bee-smoker comprising the compination set forth of a suitable barrel provided near end with a blast-opening, a suitable smoke-nozzle arranged at the opposite end of such barrel, a bellows attached to such barrel by suitable means, and a sliding tube connecting the bellows with the blast-opening, and comprising the inner and outer telescoping members, one of which is provided with the longitudinal slits to form the spring-tongue, said tongue being arranged to press upon the other member, substantially as and for the purpose set forth.

5. A bee-smoker comprising the combination of a casing provided with a nozzel at one end, a fire-barrel of less diameter than such casing, and provided at each end with an outward flange to extend across the space between the fire-barrel and the casing, and provided with the air-passages in such flanges, the damper of approximately the same diameter as the inside of the casing, and provided with the notches in its periphery corresponding to the air-passage in the flanges of the fire-barrel, and the spring-tongue arranged to project through one of the passages in the flange and engage with such flange to hold the damper in position upon the end of the fire-barrel.

Mr. Frank Benton, of Washington, was present at the convention last week in Chicago, and helped to make it interesting. We had several long interviews with him in relation to some important subjects to bee-keepers, and will have more to say about it later on. It was quite a compliment to the Illinois State Bee-Keepers' Association to have the Government send Mr. Benton as a delegate from the Department of Agriculture at Washington.

Tales for Travelers.—"Tales for Travelers" contains seven completed short stories, illustrated in the highest possible style of art. These stories are by the rising American short story writers. Those who are pleased with this sort of fiction, and they number thousands, will find this little book the very best ten cent investment to be had. Address, the Arkell Weekly Co., 110 Fifth Avenue, New York.

Many Premiums were offered in last number of the BEE JOURNAL, and you should avail yourself of them. A little effort among your bee-keeping neighbors no doubt would result in an increased number of new readers for the BEE JOURNAL, and at the same time secure some of our excellent premiums for yourself. Show the BEE JOURNAL to your apiarian friends, and see how quickly they will subscribe when it costs less than *two cents a week.*

Be Sure to read offer on page 557

Progress is the watchword of all modern undertakings. The intelligent bee-keeper must study incessantly. Nearly every colony has its peculiarities, which must be considered, and adaptations made for its treatment—such as, how much it will have to be helped or stimulated to get it to the proper pitch by harvest time. Success in almost everything is won by attention to details, and this is particularly true in bee-keeping.

In these days of progressiveness, feats are heralded which in earlier days would have been looked upon with incredulity, but which are now received with perfect credence. The sending of queen-bees safely from one side of the ocean to the other, or from the Western Hemisphere to the Eastern, through the mails, a few years ago would have been looked upon as almost an impossibility, when to-day it is common, and very little talked about. What next?

To bee or not to bee, that's the question.

The Amateur Bee-Keeper, by J. W. Rouse, is a book of 52 pages, intended, as its name indicates, for beginners. Price, 25 cents. For sale at this office.

Milk-Weed Honey Samples were received recently from Clark H. Montague, of Archie, Mich. We received the following from Mr. M. in regard to the two samples sent, which was written just before forwarding the honey:

I will send you samples of milkweed honey. One is a sample of honey extracted after the cells were *all* capped; the other was extracted just as the bees *commenced* to cap the cells, then put into a tank and covered over with cheese-cloth.

I will be much pleased if you will state in the BEE JOURNAL whether or not you can find any difference, and if you can, state which is which. I marked one vial by tying a string around it.

CLARK A. MONTAGUE.

Upon receipt of the samples of honey we tasted them, and noticed that the honey in the vial with a string around its neck was the milder tasting of the two, and judged that it was the one that had been extracted just as the bees commenced to cap the honey. We suppose the milder taste was due to the fact that it had not been evaporated so fully as the other sample.

After forming our judgment on the matter, we wrote Mr. Montague our decision, and here is his reply thereto:

The vial with the string contained a sample of "pure" "milk-weed" honey, and was extracted just as the bees commenced to cap the cells. Some combs showed no caps at all, and others may have had ¼ of the surface capped.

The other vial contained nearly pure milk-weed honey. I am unable to say what gives it the stronger, and, to us, peculiar flavor. The only pure milk-weed honey we secured this season was extracted before it was entirely capped. The bees commenced to work on something else about that time.

A commission firm of Grand Rapids pays me two cents per pound more for "milk-weed" honey than they have to pay for best "California" honey.

CLARK H. MONTAGUE.

Honey from milk-weed is indeed quite fine, and the Michigan bee-keepers who are so fortunate as to be near enough to secure it, should feel grateful.

Bee-Stings and Rheumatism.—In a recent issue of the *British Bee Journal*, is an account of what seems to be a clear case of great relief from the effects of rheumatism by the application of bee-stings. It has often been stated that bee-stings are a great cure for this severe trouble which so frequently renders the sufferer quite helpless, besides having to endure the pain.

Below we present the experience of a rheumatic individual, as described by Philander Jowett in the bee-paper referred to above. If there is truth in it, at least no bee-keeper should longer "enjoy poor health," if from rheumatism. Here is the account as published:

I sometime ago came across a few articles having reference to bee-stings as a cure for rheumatism. The subject had passed from my mind until just recently, when a particular friend of mine, who has suffered from this annoying complaint, was stating his case to me, and I at once remembered what I had read, and told him about it. His curiosity being aroused, he asked to see the letters, and came to my apiary to try the effect of the remedy.

My friend is an ex-police sergeant, who has suffered acutely for years from rheumatism, and passed through the hands of several medical men, and spent seasons at various convalescent homes, undergoing various kinds of treatment, but all to no purpose. However, on Monday, the 11th of last July, he came to see me, suffering from severe pain in his right elbow and right ankle. With the help of my bees I gave him eight stings, three upon the elbow, and five upon the ankle. When he came he could not lift his arm, and it was with very great difficulty that he managed to walk, a distance of two miles, to my place; but 20 minutes after being stung, he could work his arm about as freely as if he had never had any rheumatism in his life, and he walked away like a two-year-old.

On the following night he came down to have another application, and told me he had not had so good a night's rest for six months, as after the bee-stings his pain was gone, and his ankle was three inches less in circumference than it had been for two years previously.

I gave him 16 more stings, six on each ankle, and four on the elbow, with the result that he was quite free from pain until the 27th ult., when he felt a slight return of his old enemy, and came for a third dose. I gave him another 12 stings, six on each ankle, and when I saw him on the 30th, he treated me to a short hornpipe to show me the good he had received from his "little friends," as he called them.

He is quite anxious for the case to be published, in order to ascertain if any case of permanent cure had been effected by bees. As for his own experience, he is quite willing to answer any questions with respect to it, and equally anxious to know if he may look upon it as a permanent cure, or only as a question of having ease for a time only; and if any of your numerous readers have had a similar experience, he would like them to state the particulars through your columns, and, in return, he will do what he can to satisfy them as to the genuineness of his own cure, so far as it has gone.—PHILANDER JOWETT.

Tomato Culture is the title of a new and neat pamphlet of about 140 pages, published by A. I. Root, Medina, Ohio. Price, 40 cents, postpaid. Its name indicates the subject which it treats. The first part is by Mr. J. W. Day, of Crystal Springs, Miss., the pioneer tomato-grower in the South, and the man who raises tomatoes by the hundreds of acres for the Chicago markets. Part second is by Mr. D. Cummins, of Conneaut, O., proprietor of the Lake-Shore Canning factory. His directions were given primarily for the benefit of farmers round about him, who raise tomatoes for his canning works. The last part of the book is by Mr. A. I. Root, who has taken the liberty to visit both of the above-named gentlemen, and adds touches here and there to the book, from the beginning to the end. We hope it will be found of value, not only to tomato growers, but to gardeners in general, especially those who expect to protect their stuff from the early and late frosts.

Don't Fail to read all of page 557.

The Honey Exhibit at the Detroit, Mich., Exposition this year was highly spoken of by the *Michigan Farmer*, which gave a good report of the exhibits in the apiarian department, and in which it says that Michigan bee-keepers have only to put their heads—and honey—together to make a showy and popular exhibit whenever called upon. Hence it "goes without saying," that the apiarian department, under the management of H. D. Cutting, of Clinton, was a credit to the Exposition.

The exhibitors were M. H. Hunt, of Bell Branch; W. Z. Hutchinson, the well-known editor of the *Bee-Keepers' Review*, and his brother, E. Hutchinson, of Flint; Mr. A. Kennedy, and J. H. and A. L. Boyden, of Saline. The latter are new exhibitors, and bought out Mr. Cutting's apiary last spring. Mr. Cutting has a "persuasive way" about him which somehow induced these young apiarists to enter the list of exhibitors.

The premiums were awarded by Prof. Larrabee, of the Agricultural College, and his decisions seemed generally satisfactory.

The premiums were quite evenly divided among the exhibitors. M. H. Hunt took sweepstakes premium for largest and best exhibit, Mr. Hutchinson second, and Mr. Boyden third. Mr. Hunt also took first for foundation, and for best foundation made on the grounds.

W. Z. Hutchinson took first on largest collection of different varieties of bees, also for largest collection of varieties of honey (one lady inquired if the samples were "medicine"); E. Hutchinson second; W. Z. Hutchinson took first for comb honey, and Mr. Kennedy second. Mr. Boyden took first on some exceptionally fine samples of beeswax, and M. H. Hunt second. There were other premiums given which we failed to get.

Kansas State Building at the World's Columbian Exposition, in 1893.

The comments of passers-by were very amusing to the bee-keepers, who patiently answered all inquiries, but reserved the right to smile *sub rosa* at a glaring display of ignorance. Nearly every one observed the ceaseless activity of the bees in the frames, believing them to be "making honey" instead of feeding upon it. One nice old lady who came along, peered curiously around the frames and said, "Deary me! those are the queerest fly-traps I ever saw."

The honey crop this season, says Mr. Cutting, has been very uneven. In some localities the bees have done well, in others the honey harvest has been poor.

CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

How to Begin Bee-Keeping.

As I am often asked, "How shall I begin bee-keeping?" I will try to tell you the best I can.

First, you should get some bees, then by subscribing for a bee-paper and getting a bee-book, begin the practice with the theory, and you will succeed faster and surer. Some of us might read agricultural papers all our lives, or for years, then put us in the field to secure a crop, and we would most likely fail; so we need the practical part as well as the theoretical.

It depends altogether upon what kind of a person you are, as to how many colonies you should start with; one colony would be a plenty for some, while others might run 50 profitably from the start. Be a little bit your own judge about that.

It will be a nice little experiment to buy your start in box-hives, and try your hand at transferring, going by the directions in your book. After you transfer, and find you have been successful, you might venture again, etc. But, by all means, do not get excited, and upset the whole thing. Should you fail on the first experiment, try again. And, by the way, if you do not at the beginning make up your mind to promptly meet all failures with a renewed determination to succeed anyhow, you had better quit before you begin, as bee-keeping is as apt to give its disappointments as other branches of our rural industries.

Some will tell you to start with frame hives, by all means; but, if I had to start again, I would get the cheapest bees I could find, and transfer, as that is a bit of experience the beginner first needs, and my instructions are for the beginners with limited means, and I would have you start right, so as to have as few disappointments as possible, as those with plenty of means may make a failure, and not hurt them much, but when one puts his all into an investment, he would like to be sure of something back.

So, get some bees in some box-hives, transfer them, and after you get started, and think you can afford it, get some Italian queens from some reliable breeder, and Italianize your apiary. Move step by step, and be quick to "catch on" to everything you hear about bees at conventions and other places, and especially from those you know to have made the pursuit a success, and you will soon learn what it used to take bee-keepers years and years to learn.

I will, from time to time, give bee-keeping "from the stump" up to the present management, the best I can, and the veterans will please excuse us.

Recipe for Keeping Fresh Meats.

Seven pounds of common table salt, 2 pounds of brown sugar, 2 ounces of saltpeter, 2 ounces of black pepper, and 2 ounces of cayenne pepper, to 100 pounds of meat sliced thin (boneless). Stir the ingredients all together, place a layer of the compound and a layer of meat into an earthen vessel, weight it down, and it will keep any length of time.

Quick Introduction of a Queen.

A man living five miles from me had a queenless colony, among which were laying workers, putting two to six eggs in a cell. He came to me for an Italian queen, and kept her in the hive five days before risking her release; on the sixth day she was thrown out dead.

Last Friday he came for another Italian, and was going to try them again, when another neighbor came and told me he was going to "rob" a box-hive, and that if I wanted the bees I could have them for helping him "rob."

The owner got the honey, and I took the bees, while the man with the laying workers took the black queen and instead of giving the Italian queen to the vicious colony with the laying workers, he divided another large colony, and gave them the Italian, then turned the black queen loose at the entrance of the hive with the laying workers, and let her run in.

He says that the next morning she

was in complete control of the colony. He used no smoke.

Now, did these bees prefer a black queen to an Italian, or had they been queenless so long as to abandon all hope of rearing one of their own, and were ready to accept anything in the shape of a queen that came along?

GEORGE MOTT, M. D.

Spurger, Tex., Sept. 12, 1892.

Doctor, I do not think that bees show any preference, or use any partiality, between a black or an Italian queen. Your neighbor's bees were probably in better condition to receive the black than when the Italian was introduced. However, some queens are harder to introduce than others, on account of their actions. When a queen is wild, and starts to running or "squalking," the bees become excited and chase and ball her; when, if she had behaved herself, and kept quiet, she would have been received all right.

Spring Management of Bees.

Mrs. Atchley, I wish you would give me a good plan for managing bees in spring. EMANUEL B. KAUFFMAN.

Brickerville, Pa.

Just as soon as it is warm enough in the spring so that your bees will not be damaged by handling, overhaul them, and see if the queens, as well as the bees have come through all right. Should any be short of stores, fill an empty comb with honey or syrup, and hang it in the hive close up to the cluster. If they become stimulated enough by this feeding to rear brood, you may keep close watch on them for they will need food again almost before you know it.

Now, you had better keep feeding this colony, or the colonies, moderately until honey enough is being gathered to support them. This looks to be expensive, but I have never yet seen a season that it did not *pay to feed*, especially those colonies short of stores, and were I to run an apiary for either extracted or comb honey, and my bees had an abundance of honey in the spring, at the proper time I would extract this honey and feed it back to them, because this is one of the best stimulants I know of, and you just give me good queens, and I will assure you I will have the hives boiling over with bees at any time I want them.

Now make your own calculations, and do the stimulating in time to have the bees begin hatching about two weeks before the honey harvest—no difference at what place you are, in the United States or elsewhere, this will work just the same.

See my plan of feeding on page 492. Should you feed honey, dilute it with warm water, or, if syrup is used, make it rather thinner than you would for table use.

Now should you wish to spread the brood and drop in frames of foundation, or empty combs to aid them in enlarging their brood-nest, by all means be careful, as you may upset the whole plan you have started. But spreading the brood, if properly done, will surely be an advantage. The great danger in brood spreading is in cool snaps coming, and causing the bees to cluster closely, and leave the outside brood to chill, and be lost, hence your feed to start that chilled brood is lost.

Study the flora of your territory as well as your bees. Know at about what time your honey-plants bloom, and when they do bloom do not take it for granted that you are now safe, for they may not always produce honey. But keep up your feeding until you *know* the bees are getting honey.

Safe Way for Introducing Queens.

I have a way of introducing queens which is *absolutely safe*. I take 8 frames of hatching brood, without a bee on them, and put them into a hive with the queen, and place a 5 gallon can of hot water in the hive every night for four or five nights. At the end of that time they can go it for themselves.

THOS. S. DOWSE.

Friend Dowse, your plan of introducing has been used more or less for years, and I believe it is getting old and behind the times, notwithstanding it is a safe and sure way, but almost too much work for progressive and bread-earning bee-keepers.

Your Subscription to the BEE JOURNAL—is it paid up to date? If not, please send to us a dollar for a year, and thus show your appreciation of our efforts in your behalf. Look at your wrapper-label, and if the date looks like this—"Dec91," that $1.00 sent to this office will make it look like this—Dec92

Utilizing Brood-Combs when Producing Comb Honey.

Query 842.—What is the best plan to make use of a lot of nice brood-combs, should I wish to work my bees for comb honey, allowing each colony to swarm once?—Iowa.

Hive the swarm on them.—M. MAHIN.

Hive the swarm on them.—C. C. MILLER.

Use them to hive your swarms on.—MRS. J. N. HEATER.

Use the brood-combs to hive the swarm upon.—DADANT & SON.

Fill the lower hive of the new swarm with combs.—MRS. L. HARRISON.

I should hive the swarms on those combs, if they were mine.—G. M. DOOLITTLE.

I use them to hive my swarms on. In this way they are very profitable in my apiary.—G. W. DEMAREE.

Give the combs to the new swarms, and put the supers on at once, when the bees are hived.—E. FRANCE.

I should use them to build up weak colonies in the spring, and to give to early swarms.—J. P. H. BROWN.

Use them for the swarms, but restrict each swarm to combs equal to five Langstroth frames.—R. L. TAYLOR.

I cannot say what *the best plan* would be for *you* to follow, but you can use them in many ways, with the best of success.—H. D. CUTTING.

I don't think I quite get the point. If I had a "nice lot of brood-combs" I should use them in preference to foundation or empty frames.—J. E. POND.

Use them for the new swarms, and add sections so as to prevent further swarming. Kill old queens if necessary to do this. It is a nice work,—A. J. COOK.

Hive the swarms on the old combs, at the same time setting over the surplus at the time on the old colony, and if receptacles are pretty full, put on more surplus room at the time. I have practiced this for 20 years.—JAMES HEDDON.

If I used a large brood-chamber I would melt up such combs if I did not want to use them for extracting purposes. With a small, shallow brood-chamber—such as I use—nice, empty brood-combs are very valuable in hiving swarms, where a queen-excluder is used, in producing comb honey.—G. L. TINKER.

Hive your swarms in a contracted brood-chamber, filled with frames of foundation. As soon as the early honey-flow is over, use empty combs to enlarge the brood-chamber to its normal size. If there is a fall yield of honey, manage so as to have these combs full of hatching brood by the time it begins.—JAMES A. GREEN.

When the swarm issues, use a frame or two when hiving—just enough to induce the queen to occupy them—filling the hive with frames filled with foundation (or only starters, as thought best). Put on supers at once. I have grave doubts of the economy of using a hive *full* of finished combs for a swarm.—EUGENE SECOR.

The *best* use to make of brood-combs for producing comb honey varies according to the season. In a good honey year I would not use more than two or three combs to each hive to put swarms on. The other frames should be full sheets of foundation. In poor seasons, or late swarms, use full hives of comb.—C. H. DIBBERN.

The best plan, in my estimation, would be to give the new swarms the nice brood-combs. Some say, hive your swarms on empty frames or foundation starters; but I should like to run a race on who would get the most honey—the one with empty frames or foundation starters, and myself with all the nice brood-combs I wanted.—MRS. JENNIE ATCHLEY.

Do you refer to winter or season care? Of course in storing away for winter, they should be carefully gone over, and all moth-worms or webs brushed out, and then stored in a warm, moth-proof room or receptacle. If you have reference to season work, any outline of plan would necessitate an article upon the subject. Procure a good bee-book, and read up on the subject.—W. M. BARNUM.

The Races of Bees—Italians are the Best.

Written for the American Bee Journal

BY WM. S. BARCLAY.

It has been a long time since I have written for the "old reliable," and I am almost ashamed to confess that I do so now seeking information. In looking over the ground recently occupied by our bee-keeping friends, I have almost given up the hope that we were unjustly charged, when a few years since we were called a "set of cranks."

How could I otherwise feel when I find such men as Mr. Alley wishing to sell us "Punic queens" (a black race, if I understand them)—him whom I look upon as the best breeder of the Italian race? and still further, I find some who are willing, at this late hour, to contest the supremacy of the Italian, and earnestly recommend the black or German bee. To say that I am astonished at such writing, will not express my full meaning—I am worse than astonished—I feel lost.

I have had the Italian bee for a long time (30 years). I have experimented with many other races—Holy Lands, Syrians, Hungarians, Carniolans, and all other races except Egyptians and Cyprians (and I want no more of the last named). I believe I wrote an article for these pages, or at least for some paper, highly praising the qualities of the *Syrian bee;* nor is my confidence in this race a particle lessened, for I am fully pursuaded that our much-boasted (future) *Apis Americana* will be produced (if ever) by a cross of our best Italians, or Syrians, with our native bees.

But when I see some of our foremost apiarists going back to the black race, and strenuously recommending them to the attention of our bee-keeping fraternity, I have about concluded that I know nothing about bee-keeping, and had better quit; indeed, after four bad seasons in succession, I had almost concluded to abandon the science altogether, but this for one who loves it as well as I do, is hard to do, and I have concluded, like Col. Crockett, "to pick my flint and try again," and here, pardon me for saying to all young beginners at least, *stick to the business.* In this you cannot do wrong. Leave all experiments to others who are older, and better qualified to make them than yourself, and take a race of bees recommended by the most prominent men in our profession, and which have been found truly worthy of your most careful attention. After an experience of longer than a quarter of a century with this bee, I feel truly sorry that the span of life could not be lengthened, that I could, by careful breeding, learn the full capacity of the Italian race.

Why, I ask, did we abandon the black or German bee, and adopt the Italian? The answer is too plain, and I need not worthlessly occupy these valuable pages, and your time in reading, by attempting to reply. This much I know, as do others who have cultivated Italians, that we have much more honey than we used to have (and what else do we keep bees for?); that we have no trouble from the moth, as we used to have; and that we have much fewer winter losses than we used to have when we kept the black or German bee.

Besides, our careful breeders (!) have advanced so far that they have painted our favorite bee with five yellow stripes; whether this will make it any better, I feel like Dr. Miller, and say, "I don't know." I feel that three stripes are enough for me, and I want them *dark stripes*, at that.

Now, I do not write this to invite controversy as to the merits of the Italian *vs.* the black or German bee, but merely to ask our bee-keeping brothers whether they have not heard enough of the black bee (Mr. Ellingwood to the contrary, notwithstanding). The pages of our "old reliable" are too valuable to be consumed by such writing, and if our friends of black-bee proclivity must air themselves in type, let them tell us how to successfully winter bees; how we may get the most comb or extracted honey; whether any particular location may be overstocked with bees; or anything else that will be of importance to us in our labors. But do "give us a rest," please, in the *good* qualities of the black bee.

Beaver, Pa., Sept. 26, 1892.

The Mating of Queen-Bees, Heredity, Etc.

Written for the American Bee Journal

BY DR. A. W. TUFTS.

On page 431 Rev. W. P. Faylor says, or we infer that he means, that he witnessed a meeting between a virgin queen and a drone, or drones. Now I beg leave to differ from Mr. Faylor, and venture to express a fear that he has drawn his conclusions from insufficient evidence. I do not believe that there was any copulation in that case.

I have reared several hundreds of queens in the last seven or eight years, and although I have often seen the virgin queen come out of the hive and take her flight, and have often seen them return from their bridal trip, I have never seen them in the act of copulation. Therefore, my experience and evidence is negative rather than affirmative as an eye witness.

I have often had the hive open, looking for a queen, when she would return from her bridal flight, and run in, or in several instances alight on the tops of the frames, with the remains, or a portion of the sexual organs of the drone, still protruding from the vulvæ of the queen. Immediately—I might say instantly—upon her alighting she was followed by the worker bees, that proceeded to bite or tear away the protruding portion, and in the course of one or two minutes, or less time, all protruding portions would be removed, leaving no evidence that copulation had taken place that day. Hence, I conclude that such observers are correct in their teachings in our text-books, that copulation can only take place on the wing, and that the sexual organs of the drone are taken away, and consequently the death of the drone ensues.

It is also, if I have correct evidence, that there can be but one meeting of the same queen and a drone, during the bridal flight of a virgin queen. As to whether she may come from the hive at any future time to mate again, is a question that is not within the scope of this article.

As to the different shades of color of queens reared from the same mother, I think that we will have to seek further, and a more possible reason, as the meeting of the same queen with different drones is not even a tenable hypothesis. We see the same attribute in all orders of the animal kingdom—progeny that differ from either parent in color or complection, and inasmuch as it is ascribed to heredity in the animal kingdom, why not the same law hold good among the insect tribes? I find from experience that heredity is a very marked and useful attribute in the genus *Apis mellifica*, as we can breed out, or in, almost any trait that we desire that they should be possessed of, or otherwise.

Musson, La.

Bee-Keeping With Mixed Farming—Specialists.

The idea is too prevalent that bee-keeping to be a success must be conducted as a business by itself; when in reality there is nothing in which a person can do so well as a "side-issue" as to keep bees in connection with other branches of business. Our advice is, and always has been, for the masses to raise a diversity of products, then by systematic management there will be something for the market at all seasons. Do not carry the eggs in one basket, is just as good advice now as ever.

Disease may wipe out the flocks and herds, drouth or blight destroy the crops, but all are not likely in one season, thus he with more than one string to his bow is the more likely to secure the game.

With mixed farming there is a diversity of crops, some of which produce honey nearly the entire season, and where bees are kept to gather it they pay the best of anything on the farm, if properly cared for. The price of feed and care given a cow will provide hives and fixtures and care for 20 colonies of bees, and, taken for a series of years, equal to the life of the cow, the bees will pay double the cow.

I am well aware of hitting some fellow's corns in making this statement, but it is the fact, just the same. But, says one, if that be true, why don't everybody keep bees? Tell me why you have not been keeping bees, and I'll give a reason why some others have not. Would you have been keeping cattle or hogs if you had not thought "that other fellow" was making a little money out of that business; or, did you "bite" when he unloaded?

The swine, poultry, horse, sheep and cattle industries, as well as fruit and truck farming, have all been boomed, have had their ups and downs for years. Papers without number have been published in their interest, and many a poor fellow has dropped "his all" by biting

too heavily the glittering bait, and the old story of "fool and his money" was repeated.

In apiculture it is only a few years since it was thought of sufficient importance to warrant the publication of a sheet devoted to the trade, and the oldest bee-periodical in the United States, the AMERICAN BEE JOURNAL, is now in its 32nd year. Since its establishment others have been started; some have prospered, others died. The industry is gaining ground, steadily advancing, old superstitions and prejudices removed, and the bee-keepers' pursuit raised to where education and care pay their way as well, and better than in most other pursuits.

We do not wish to decry the work of the specialist; to him we owe all the improvement in his particular line. So, too, in bee-keeping. Without those who for years made it a study, we would still be following in the old ruts.

The many in this world are not leaders, nor are all specialists, therefore we say, if you are carrying on a farm, a garden, a fruit or truck patch, keep bees. If you raise stock, keep bees, too. If you are fitted for a leader, and wish to be a specialist, study apiculture, and by all means *keep bees*. No field is better for development and profit.—*Nebraska Bee-Keeper.*

My Method of Introducing Queen-Bees.

Written for the American Bee Journal

BY JOSHUA TAYLOR.

As to introducing queens, I will say that I prefer the following method by which I have never failed:

When the queen arrives, I go to the hive and take out the queen. If the colony is already queenless, I look over the combs carefully, and cut out any queen-cells that have been started. I then place the cage on the frames so the bees can get on the wire and become acquainted with the queen, and leave her there from 24 to 48 hours, caged, so that she cannot possibly escape from the cage.

I then open the hive and look over the combs again for queen-cells, and if any are found, I destroy them. I then open the cage so the queen might walk out, but I place a little wax in her way so she cannot get out. I then close the hive, and the bees will release her, and in two or three days the hive may be opened, when the queen will be found on the combs all right.

My objection to the candy plan, or any plan by which the bees release the queen after she has been caged a day or two, is, that they may start queen-cells, and when the queen gets out they ball her. By the method given above I place so little wax in the entrance that the bees release her very quickly after the hive is closed.

If I have much difficulty in finding the queen I wish to take out of the colony, I spread a sheet down a few feet away, then carry the hive there and shake all the bees down on the sheet, place the frames in the hive and set in its place, and go about my work. In a few hours most of the bees have gone back to the hive, and the queen will be found with a few bees on the sheet.

Richmond, Kans.

Apiarian Premiums Awarded at the Nebraska State Fair.

Written for the American Bee Journal

BY L. D. STILSON.

At the Nebraska State Fair, held at Lincoln on Sept. 9, 1892, the following awards were made in the apiarian department:

Best basswood or white clover honey—A. E. Davidson and Sam Barrett.

Best comb fall honey—Sam Barrett and John Lee.

Best gallon of extracted honey, basswood or white clover—Almon Tower and A. E. Davidson.

Best gallon of extracted fall honey—S. R. Hogan and S. R. Smith.

Best granulated honey—A. E. Davidson and Stilson & Sons.

Best and largest display by any one, including bees, extracted and comb honey, and apiarian supplies—E. Kretchmer and Stilson & Sons.

Exhibit of brood-chamber and surplus foundation, full and partly drawn—E. Kretchmer and A. E. Davidson.

Exhibit of apiarian supplies and implements—E. Kretchmer and Stilson & Sons.

Display of honey in marketable shape—A. E. Davidson and M. Tower.

Best display of honey-candy, honey-sugar, and sweets where honey was used in place of sugar—Thos. Dodson.

Best honey-vinegar—Thos. Dodson and Stilson & Sons.

Best display of bees and queens—Chas. White and E. Kretchmer.

Best exhibition of extracting on the grounds—E. Kretchmer and L. D. Stilson.

Best extractor—E. Kretchmer and Stilson & Sons.

Best all-purpose single-walled hive—E. Kretchmer and Stilson & Sons.

Best chaff-hive—E. Kretchmer and Stilson & Sons.

Best bee-smoker—Stilson & Sons and Chas. White.

CONFINED TO NEBRASKA EXHIBITORS.

Best display of apiarian implements and surplus comb foundation, full to partly-drawn; bees, queens, etc.—Chas. White and Stilson & Sons.

SPECIALS.

Wax-flowers—Mrs. E. Whitcomb received $10.

Honey-sections—E. Kretchmer, $5.

Section-folder—Chas. White, $5.

Foundation starter—Chas. White, $5.

Metheglin—A. E. Davidson, $2.

Double-walled hive—A. E. Davidson received diploma.

Flowers, mounted—Fred Clements, diploma.

Lettering in honey—J. M. Young, diploma.

Self-spacer—S. A. Smith, diploma.

York, Nebr.

Experience with Prime Swarms, After-Swarms, Etc.

Written for the American Bee Journal

BY J. E. PRICHARD.

I have read very much about prime swarms and after-swarms. Last spring I had three prime swarms, two of them Italians, and one black. I also had two after-swarms, and divided one parent colony and let them rear their own queens. Now for the result:

To date, prime swarm No. 1, Italians, have stored no surplus. Prime No. 2, Italians, have stored 45 pounds. Prime No. 3, blacks, stored none, with the exception of mid-summer, when there was nothing to store, they put about ¾-pound in each of four sections, since when they have not stored a pound.

Now about after-swarms: One has stored 12 sections, and one has about 15, not capped.

Now about divided colonies: One stored 20, and another 23 one-pound sections well filled. The parent colony of blacks have done nothing, but if the season is as late as last year (Oct. 10), they should all store as much as I have taken from the few, which is about 150 pounds. I have a ready sale for it at 25 cents per section, or 5 for $1.00. I have it displayed in my bulk window, and the passers-by all stop to look at the first display of honey ever made in our town. As I sit by the window to write this, its fragrance is delightful, and I fancy that there is not an old apiarist in the West that can show a prettier sample than my first effort in bee-culture does, even with their larger productions.

There is not a moth-miller or worm in my bee-yard, unless they are in the one solitary old box-hive that yet disgraces it, and which defies inspection. But its days are numbered, and if its colony survives the winter, it will give place to an 8-frame double-walled hive next spring.

Although there is no crop that the farmers raise here that affords a respectable living for bees, yet out in God's garden there is an abundance, and I have been watching the bees to find out which of the wild flowers yield nectar, and find many heretofore despised plants are the most liberal in giving.

Port Norris, N. J., Sept. 13, 1892.

October Days.

Out in the field is the golden-rod,
Waving and bending its yellow plumes;
White is the silk in the milk-weed pod,
In the yellow days of October.

Crimson are trees of the forest land,
Berries hang red on the climbing vines,
Maples are touched by a golden hand,
And the nuts are ripe in their brownness.

Close to the grass are the asters white,
Brown on the ground lie the fallen leaves,
Circling around summer's birds take flight,
And the quails whirr up near the fences.

Over the land is the autumn haze;
Slowly at eve comes that great, round moon;
Silent and sweet are the country ways
In the golden days of October.

—Ladies' Home Journal.

The Globe Bee-Veil, which we offer on page 581 of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, at $1.00 each.

Read our great offer on page 557.

Report of the Illinois State Bee-Keepers' Convention.

Written for the American Bee Journal

BY W. Z. HUTCHINSON.

The Illinois State Bee-Keepers' Association held its third semi-annual meeting on Oct. 18th and 19th, 1892, at the Commercial Hotel in Chicago.

The convention was called to order at 11 a.m., with President J. M. Hambaugh in the chair.

The following members paid their dues:

W. Z. Hutchinson, Flint, Mich.
James A. Green, Dayton, Ills.
J. H. Larrabee, Agricultural College, Mich.
George W. York, Chicago, Ills.
W. A. Vance, Glencoe, Ills.
G. Ruff, Burlington, Iowa.
W. C. Lyman, Downer's Grove, Ills.
A. Y. Baldwin, De Kalb, Ills.
A. L. Kildow, Sheffield, Ills.
J. C. Wheeler, Plano, Ills.
Geo. Thompson, Geneva, Ills.
N. L. Stow, South Evanston, Ills.
Frank Benton, Washington, D. C.
M. H. Mandelbaum, Chicago, Ills.
M. M. Baldridge, St. Charles, Ills.
Frank Blecka, Elgin, Ills.
C. M. Beall, Clayton, Ills.

LADY MEMBERS.

Mrs. L. Harrison, Peoria, Ills.
Mrs. N. L. Stow, South Evanston, Ills.

HONORARY MEMBERS.

Wm. F. Clarke, and afterwards Frank Benton, were made honorary members.

Thomas G. Newman, the first honorary member of the association, was present.

The light crop of honey, and the failure to get the advantage of the reduced rates, made the attendance smaller than usual. It was supposed there would be reduced rates during the whole "Dedication week," and by holding the convention early in the week, it would allow the members more time for sight-seeing, but the reduced rates did not go into effect until Wednesday, the last day of the convention.

Apiarian Exhibits at the World's Fair.

It might be safely said that one-half the time of the whole convention was used in discussing the prospects of having an Illinois show of bees and honey at the coming Columbian Exposition. President Hambaugh recited at some length the trials and troubles he had borne in the way of correspondence with the "powers that be," in attempting to learn something definite in regard to whether any of the money appropriated by the State for the purpose of making a showing of agricultural products was to be given to the bee-keeping interests. Only one-half of one per cent. had been asked for, yet even that would not be granted—at least no definite promise would be given.

Mr. Thomas G. Newman had met with the members of the Agricultural Board, and with Mr. Reynolds, and he (Newman) believed that nothing would be done. These men were all full of quibbles. Most of the objections were upon technical grounds. For example, they said that a display of honey would not be *educational*. Another reason was that they considered honey a *manufactured* article. This is a disputed point. Some do say that bees *make* honey. Professor Cook says it is "digested nectar." Of course he is a Professor, and I am not, but I cannot agree with him. Honey is certainly an agricultural product in contradistinction to manufactured articles. Mr. Newman doubted if the Board of Agriculture would allow any money to be used in making an apiarian exhibition.

Mrs. Harrison contended that an apiarian exhibition would be educational. Some people think extracted honey is some sort of an "extract." An exhibition of an extractor, and the manner in which it is used, would *educate* people.

Mr. Newman said that Mr. W. I. Buchanan, Chief of the Department of Agriculture in Columbian Exposition, is a nice man, but, of course, is not an expert bee-keeper. He wrote to about twenty persons prominent in apiculture, asking for their views as to how an exhibit ought to be made. He thus secured their ideas, and he then proceeded to approve of some and reject others; but he did not always hold the same views. Each time that he was called upon he had completely upset former plans. Bee-

keepers had asked for a Superintendent, and recommended Dr. A. B. Mason for the position. The request had been ignored. If they ignore us in the past, they will in the future.

Secretary J. A. Stone—If things go on as they have, and they find that those big glass cases remain empty, they may run after us. By the way, a committee from the State Board of Agriculture has been appointed to meet us at this convention, and learn what is wanted, and I would suggest the propriety of appointing a committee to confer with the committee when it comes.

J. H. Larrabee—We have been making propositions to them, and I suggest that we let the proposals come from them.

Thomas G. Newman—I am not in favor of a committee to confer with this committee that is to come here, but I do favor a committee to meet and introduce the visiting committee.

Frank Benton—I do not agree with the idea that honey must be classed as a manufactured article. If honey is used in making wines, cakes, etc., it might then be classed as manufactured. Bee-keepers ought to urge that they be recognized the same as is the case with dairymen and others.

After some further discussion, a committee consisting of Thomas G. Newman, James A. Green, J. H. Larrabee and Frank Benton was appointed to receive the committee from the State Board of Agriculture. The Secretary was instructed to inform the committee that the bee-keepers were in session, and ready to meet them, and the convention then adjourned to meet at 2 p.m.

FIRST DAY—AFTERNOON SESSION.

The convention was called to order at 2 p.m., with President Hambaugh in the chair.

What the Government is Doing, and Ought to Do, for Apiculture.

Thomas G. Newman spoke of the great importance of this subject, and said there could be no more effectual way to bring it before the convention for discussion than to read the article by Prof. Cook, entitled, "Importance of Experiments in Apiculture," and published on page 498 of the AMERICAN BEE JOURNAL for Oct. 13, 1892. He then read the article.

S. N. Black—Private individuals cannot so successfully conduct experiments as can some one appointed and paid by the Government for so doing. The private purse is not long enough.

Frank Benton—All Government work in the apicultural line is done under the head of entomology. Professor Cook is wrong in saying that *all* governmental aid has been withdrawn, as I am still retained. He could not expect the entomological department to drop some of the regular work to experiment in apiculture. The cut in the appropriations has compelled this suspension in experimental work in bee-keeping. It is a pity that Prof. Cook did not sign his name two paragraphs higher up in his article, and thus omit the last two paragraphs. The unkind allusion to Dr. Riley is uncalled for, as he is certainly in sympathy with the movement that has apicultural experiments for its end. It was he who instituted the experimental work at Lansing, Mich. In the cut that was made in the appropriations, he was not consulted.

James A. Green wrote to Prof. Riley, and the reply showed that it was impossible for him to do more at present than he was doing.

J. H. Larrabee—Dr. Riley has assured me that he is in sympathy with bee-keepers, and in favor of experiments. I believe that more can be expected now from the State experimental stations than from the general government.

Frank Benton—Of course nothing can be done at present by Dr. Riley.

H. D. Cutting—Don't you believe that by urging the making of experiments by the general government, or the establishing of a Division of Apiculture, that it will tend to centralize work, and take it away from the State experimental stations?

Frank Benton—Not at all. If you want work done at the State experimental stations, you must apply to the Directors of the stations. If you want something of the general government, then apply to Dr. Riley.

Thomas G. Newman—I think that too much stress should not be laid upon the manner in which Prof. Cook referred to Dr. Riley. Professors, lawyers, doctors, etc., get off these "squibs" on one another, and they must not be taken too seriously; at least this part of the subject is not for us to waste time over. What we need is, to appoint a committee to look after this matter at our State experimental station, and I offer the following:

Resolved, That a committee of three be appointed to submit resolutions on the subject of our obtaining recognition

from the Director of the Illinois State Experiment Station, and ask for a share of the appropriation of the $15,000 from the general government for experimental purposes.

The resolution was carried, and the following committee was appointed: Thomas G. Newman, Mrs. L, Harrison, and George Poindexter.

Affiliation with the North American.

Upon motion of Thomas G. Newman, it was decided that the Illinois State Bee-Keepers' Association would affiliate with the North American Bee-Keepers' Association.

Upon motion of Mr. Newman, a committee consisting of W. Z. Hutchinson, J. A. Stone and James A. Green was appointed to look up the matter of the smaller bee-societies of the State affiliating with the State society.

The convention then adjourned to meet in the evening, but upon coming together there were so few present, many having gone to visit or to see the sights of the city, and others desirous of so doing, that the convention at once adjourned to meet the next morning at 9 a.m.

SECOND DAY—Morning Session.

The convention was called to order at 9 a.m. President Hambaugh called upon Mr. James A. Green to open the meeting with prayer.

Mr. George W. York, the new editor of the American Bee Journal, then delivered the following

Address of Welcome.

Mr. President, and Members of Illinois State Bee-Keepers' Association:—

To do full justice in welcoming such an important organization as yours to such a marvellous city as ours, I realize it is indeed no small task. Hence, it is with a feeling akin to fear when I consider my own incompetency to do both yourselves and the city justice, and so I almost tremblingly undertake the performance of the duty assigned me.

My position to-day in the field of apiarian literature has made me somewhat familiar with just the kind of nobility I am called upon to welcome to this World's Fair city, and, in fact, it seems to me like receiving into the city in which next year is to be held the greatest Fair known to the world, the *world's fairest and sweetest people.* Such indeed might be the case, did I not bear in mind my duty to others of our broad land, who are alike engaged in the same ennobling and useful pursuit, and who would justly claim an equal right to the appropriate appellation—"the world's fairest and sweetest people."

In welcoming you, my friends, within the borders of our city, I am much impressed with the favorable reputation of your organization; for no less a personage than our esteemed mutual friend and co-laborer, the editor of the magnificent *Gleanings in Bee-Culture*, recently said this of you:

"Next to the North American, the Illinois State Bee-Keepers' Association is the most important, probably, of any bee-keepers' association in the United States. Since it receives annually an appropriation of $500 from the State Government, it is in a position to do effective and important work for the bee-keepers of Illinois."

That, *I* consider, is a great compliment, indeed, and to say that you are entirely worthy of such a high estimate, I feel is nothing more than the actual truth.

Knowing, as I do, something of the greatness and reputation of the city in which you now are, and having myself somewhat of a long range, yet blessed, acquaintance with many of those to whom I am speaking, and whom I am to receive, let me say that it is with the purest pleasure that I extend to the members of the Illinois State Bee-Keepers' Association a most cordial welcome to all that is grand, and glorious and sublime, in this our Western metropolis.

When I consider the magnitude and great usefulness of the industry which your membership represents—with its thousands upon thousands who are earnestly devoted to making our land more fruitful and its inhabitants more sweet; when I remember the antiquity of your calling, for indeed history tells us that away back in the centuries there was "a land flowing with milk and *honey*;" when I think upon the future that lies just before you, which is big with promise of untold and undreamed of blessings—when I consider, remember, and think upon, these things, I am led to appreciate the true nobility of the life and character of those whom it is my delight and honor to welcome to our city to-day.

That your deliberations may be such as shall bring to all your minds and hearts a better comprehension of your duties and responsibilities; that your coming together may result in the furtherance of all those things that shall

eventually contribute to your general as well as individual welfare and advancement; and that the highest enjoyments that can possibly come from the best of health and sweetness of disposition, may *all* be yours, throughout the present and eternal years, is the sincere wish of him, who again, in the name of the people of Chicago, bids you a most hearty welcome.

GEORGE W. YORK.

(Continued next week.)

There's Not a Young Person but what can secure at least *one* new subscriber to the BEE JOURNAL, and get the splendid Premium offered on page 557. Try it.

Have You Read page 583 yet?

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees Almost Drowned—Bee-Trees.

The winter of 1891-92 was a hard one on bees, as I lost 22 out of 31 colonies, and on June 9 we had a cloud burst, or something of the kind, and the creek overflowed its banks, and carried my bees off across the lot, filling the hives with mud and water; but I got them out, and turned clean water through them, and cleaned them up as best I could, but 2 more colonies died, so I had but 7 left; they have built up in good condition for winter, and gave me a surplus of 18 pounds a piece. On June 20 I bought 4 colonies, and they have done extra well; from 2 of them I have taken 124 pounds each, and one of them cast 2 good swarms. How is that for Allegany county? I have found 9 bee-trees this fall, and they have averaged all the way from 80 pounds each to nothing. CHAS. TAREY.

Houghton, N. Y., Oct. 17, 1892.

Good White Clover and Fall Bloom.

Bees have done fairly well here the past season, considering their poor condition in the spring. I had 59 colonies last fall, and only 27 when white clover began to yield honey, and they were nearly all very weak, and were unable to store surplus until the season was well advanced. The flow from clover and fall bloom was good. I increased, by swarming, to 58 colonies in good condition, with plenty of good honey to winter on. I believe that bees will winter better than for several years past. The prospects are good for a honey season next year. White clover is plentiful, but it needs rain. I finished packing my bees with chaff on the summer stands on Oct. 7th. I use the Quinby closed-end frame hive, and like it better than any hive I have seen. My honey crop amounted to 1,000 pounds of comb and extracted.

GREEN R. SHIRER.

Greene, Iowa, Oct. 15, 1892.

Honey and Cotton Crop Failures.

Our honey crop is a failure in this district. Our cotton is also a failure, as half a crop is all we will get.

W. H. DOWNS.

Yazoo City, Mich., Oct. 7, 1892.

The Season of 1892, Etc.

I began the spring of 1892 with 40 colonies, having lost 5 from starvation while in winter quarters. I did not lose as many as my friend, Thos. Johnson, of Coon Rapids, thought I would, in his communication to the BEE JOURNAL. But about 15 out of 40 were not in first-rate condition.

I have taken, during the season, 2,400 pounds of honey, most of which is white honey—600 pounds of comb honey in sections, and the balance is extracted. I have had 15 prime swarms, and increased to 58 good colonies, with plenty of stores from white clover and linden. I have sold nearly all the honey that I will sell, at 10 cents for extracted and 12½ for comb. I am now buying all the good comb honey I can get, but it is a scarce article, as almost all have on old, black and dirty sections, thinking thereby to save money. The honey may be first-class, but if the wood is black, or the section left on too long, they must pass as second-class sections. If everybody could see this just as it is, there would be more first-class honey.

The AMERICAN BEE JOURNAL is necessary for me to have, in order to keep abreast with the other bee-keepers. I have been keeping bees ever since the end of the Great Rebellion, in which I had the honor of participating, being a member of Company I, 29th Iowa Infantry. Bee-keeping with me has been up, and then down. I have taken from nothing to 120 pounds of honey per colony. I believe I have learned as many new things this year as any other one year in my life—that is, new to me. When I have all finished up for the season, I will possibly write again.

O. P. MILLER.

Glendon, Iowa, Oct. 15, 1892.

Honey Crop an Entire Failure.

The honey crop in this section of the State was an entire failure. Eighteen colonies gave me 6 pounds of comb honey—the only honey in this locality this year.

White clover was plentiful, but yielded nothing. The hives were full of bees, but the cold weather in May seemed to cause the flowers to be void of nectar. An old bee-keeper says that he has observed, for the past 50 years, that cold and wet weather during May is ruinous to a honey crop; that warm and pleasant weather, with showers, is followed by a good yield.

Our colonies are packed for winter in good condition—full of young bees and good stores; and we hope for better success next season.

R. B. WOODWARD, M. D.

Somerset, Ohio, Oct. 12, 1892.

Every Boy and Girl will be interested in reading page 557 of this issue of the BEE JOURNAL. And we shouldn't wonder if the older folks, also, would be much pleased. We offer the BEE JOURNAL from now to Jan. 1, 1894, for $1.00, to a new subscriber, and give the "World's Fair Combined Games and Puzzles" as premium for getting such new subscriber. Or, we club it with the BEE JOURNAL for one year for $1.20.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

Bees in the Tropics.

A statement has been going around in the papers for some years (and it is surprising how it keeps bobbing up as a news item) that if bees are removed to the tropics they will gather great quantities of honey the first few years, but as soon as they learn that there will be no more winter, they become lazy, and only gather enough to last them from day to day. What bosh! Cuba is one of the greatest honey countries in the world, where the bees have worked the same for centuries. The same is true of Australia and South America. However, this is only a harmless lie, and can be more easily overlooked than some other lies.—C. H. DIBBERN, in *Western Plownan.*

How to Bring Up a Son.

Make home the brightest and most attractive place on earth. Make him responsible for the performance of a limited number of daily duties. Talk frankly with him on matters in which he is interested. Sometimes invite his friends to your home and table. Take pains to know his associates. Encourage his confidence by giving ready sympathy and advice. Be careful to impress upon his mind that making character is more important than making money.—*Young Men's Era.*

Orange Honey in California.

The chief interest a bee-keeper has in an orange grove is the honey it produces. In March and April the blossoms come out in profusion and the air is burdened with their fragrance. The odor is not unlike our old-fashioned lilac of the East. The blossom is slow to open, and not in a hurry to fall. It therefore gives the bee three or more weeks in which to collect the nectar.

At present the orange area is not great as compared to sage and other

flora, but in a few years where there are now 1,000 orange trees within an easy range of any apiary, there will be tens of thousands, for the level sage lands are being reclaimed by irrigation and planted to orange and other fruits. The bee works all day long on the blossoms, and their busy hum rises so loud and earnest as to attract the attention of the most indifferent pedestrian, and although there is an abundance of honey obtained from the orange, there is much more sold in the markets than is obtained.

Orange honey is considered rare, and pure orange-blossom honey is rare from the small area from which it is gathered; but rareties are always sought after, and, of course, the average groceryman has not cultivated his conscience to that superlative degree that will prevent him from calling any nice honey "orange," and I am somewhat skeptical about there being much purely orange honey shipped from the State, though there are tons of honey sold as such.—*Gleanings.*

Bees that Tell Time.

No, this isn't a story about live bees that did something at a certain hour every day in the week, showing that they could "tell time;" but yet the title is true. Read about this clock, and see if those bees don't tell time. And wouldn't you like to see the clock?

A clock recently patented in France is made in imitation of a tambourine, on the parchment head of which is painted a circle of flowers corresponding to the hour-figures of ordinary dials. On examination, two bees—one large and the other small—are discovered crawling among the flowers. The small bee runs rapidily from one flower to another, completing the circle in an hour, while the large one takes 12 hours to complete the circuit.

The parchment surface is unbroken, and the bees are simply laid upon it; but two magnets connected with the clockwork inside the tambourine move just under the membrane, and the insects, which are of iron, follow them.—*Selected.*

When Fruit-Trees Need the Bees.

In very fine seasons when the springs are bright, fine and mild fruit will doubtless set very well without the intervention of bees—the wind, assisted by the sunshine, being a sufficient agent for the distribution of the pollen; but in cold, wet seasons the aid of bees is unquestionably essential to the fertilization of the bloom by carrying the pollen, not anywhere at haphazard, as the wind does, but from blossom to blossom, and nowhere else.

In wet and cold weather the pollen is more inclined to adhere to the blossoms than in fine, warm weather, and thus it is that the wind fails in unfavorable seasons to secure that which can then be obtained only by the help of bees, viz.: the proper fertilization of the fruit-blossom, with the result of a proportionately abundant crop of fruit.

I would invite any persons who may be incredulous on this point to visit in a confessedly bad fruit year—say during August or the early part of September—the localities in which our great apiaries are situated. Let them carefully view the country lying in a radius of two miles from the apiary itself, and they will find that in almost every case the fruit-trees are laden with heavy crops, while they will observe as they get farther from the vicinity of the apiary (supposing that not very many bees are kept in the country around) that the fruit crops steadily deteriorate.

I am convinced that so soon as bee-keepers and fruit farmers begin to recognize the importance of the one industry in relation to the other, more prosperous times will be in store for both, and we shall not only hear of better fruit harvests, but of larger returns of honey also.—*Selected.*

Extra Eight Pages were added last week to accommodate a few premium pages. Look at every page and see if we do not offer something that you want. It will pay you to get some new subscribers for the BEE JOURNAL, and secure one or more of the premiums offered.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 583, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present

AMERICAN
ESTABLISHED IN 1861
OLDEST BEE PAPER IN AMERICA
BEE JOURNAL

PUBLISHED WEEKLY BY

GEORGE W. YORK & CO.,

At One Dollar a Year,

199 RANDOLPH ST., CHICAGO, ILLS.

TO CORRESPONDENTS.

The Bee Journal is sent to subscribers until an order is received by the publishers for its discontinuance, and all arrearages are paid.

A Sample Copy of the BEE JOURNAL will be sent FREE upon application.

How to Send Money.—Remit by Express, Post-Office Money Order, or Bank Draft on New York or Chicago. If none of these can be had, Register your Letter, affixing Stamps both for postage and registry, and take a receipt for it. Money sent thus, IS AT OUR RISK; otherwise it is not. Do not send Checks on Local Banks—we have to pay 25 cents each, to get them cashed.

Never Send Silver in letters. It will wear holes in the envelope, or may be stolen.

Make all Money Orders Payable at Chicago, Ill.—not at any sub-station of Chicago.

Postage Stamps of any denomination may be sent for any fraction of a dollar; or where Money Orders cannot be obtained, stamps for any amount may be sent.

Subscription Credits.—The receipt for money sent us will be given on the address-label of every paper. The subscription is paid to the END OF THE MONTH indicated.

Do not Write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Emerson Binders, made especially for the AMERICAN BEE JOURNAL, are convenient for preserving each weekly Number, as fast as received. They will be sent, post-paid, for 50 cts. each. They cannot be sent by mail to Canada.

Lost Numbers.—We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails, we will replace them if notified before all the edition is exhausted.

Always State the Post-Office to which your paper is addressed, when writing to us.

Special Notices.

The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription to the *end* of next December:

Wallace Porter Dec92
Suffield, Portage co, Ohio

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given n the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

	Price of both.	*Club.*
The American Bee Journal.....	$1 00....	
and Gleanings in Bee-Culture....	2 00....	1 75
Bee-Keepers' Review.....	2 00....	1 75
The Apiculturist.....	1 75....	1 65
Bee-Keepers' Guide.....	1 50....	1 40
American Bee-Keeper.....	1 50....	1 40
Canadian Bee Journal.....	2 00 ...	1 75
Nebraska Bee-Keeper.....	1 50....	1 35
The 8 above-named papers	6 25....	5 25
and Langstroth Revised (Dadant)	2 40....	2 25
Cook's Manual	2 00....	1 75
Doolittle on Queen-Rearing.	2 00....	1 65
Bees and Honey (Newman)..	2 00....	1 75
Advanced Bee-Culture....	1 50....	1 40
Dzierzon's Bee-Book (cloth).	2 25....	2 00
Root's A B C of Bee-Culture	2 25....	2 10
A Year Among the Bees	1 50....	1 35
Convention Hand-Book.....	1 25....	1 15
History of National Society.	1 50....	1 25
Weekly Inter-Ocean.....	2 00....	1 75
The Lever (Temperance)	2 00....	1 75
Orange Judd Farmer.....	2 00....	1 70
Farm, Field and Stockman..	2 00....	1 75
Prairie Farmer.....	2 00....	1 75
Illustrated Home Journal ..	1 50....	1 35
American Garden	2 50....	2 00
Rural New Yorker	3 00....	2 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED.—We want a printing press, and will trade Dov. hives for same. Let us hear from you. LEVERING BROS.,
18Atf Wiota, Cass Co., Iowa.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, October 22nd, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c,, according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—No. 1 comb honey, 16@17 cts. White extracted, 7½@8c.; dark, 6½@7c. Beeswax—24@25c. J. A. L.

CHICAGO, ILLS.—Fancy white comb honey is selling at 17@18c.; second grade, 15@16c. Extracted honey, 7@8¼c. Beeswax—26c. All the foregoing are scarce on our market, and in good demand. S. T. F. & C.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand good for all kinds of extracted honey at 5½@8c., according to quality. Arrivals not equal to demand. We dare not solicit new trade. Comb honey is scarce, at 15@16c. for best white.
Beeswax—Demand fair, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

NEW YORK, N. Y.—Demand is moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c. F. G. S. & C.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS. — Supply is very light. We are selling best White 1-lbs. at 18@19c. Extracted, 7@9c. B. & R.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13 @14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@ 7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

ALBANY, N. Y.—Demand good and receipts lighter than they will be later on. We think early sales best. We quote : White comb, 15@16c. ; mixed, 13@14c. Buckwheat. 12@-13c. Large and imperfect combs, and double glassed, etc., sell for less. Extracted, white, 8@8½c. ; mixed, 7½@8c. ; dark, 6@7c. Especial good demand for extracted this season. Beeswax, 27@28c. H. R. W.

NEW YORK, N. Y.—Comb is arriving freely, and demand is good. Fancy white 1-lbs. 15@17c.; 2-lbs. 13@14c. Fair white 1-lbs., 13@14c.; 2-lbs. 12c. Buchwheat 1-lbs. 11@12 2-lbs. 10c. Extracted—clover, basswood, and orange bloom, 7½@8c. Southern, 65@75c. a gallon. Beeswax—26@27c. H. B. & S.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT, 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Convention Notices.

CONNECTICUT.—The fall meeting of the Connecticut Bee-Keepers' Association will be held at the Capitol at Hartford, on Thursday, Nov. 3rd, 1892. MRS. W. E. RILEY, Sec.
Waterbury, Conn.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m. on Monday, Nov. 28, 1892. All bee-keepers are invited to attend.
Friendship, N. Y. H. L. DWIGHT, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium ? Read the offer on page 583.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

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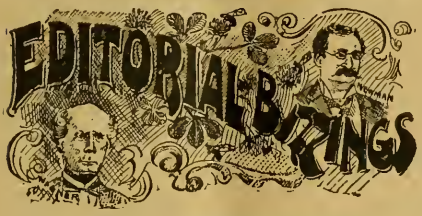


"**Thou Cheerful Bee,** come freely, come,
And travel round my woodbine bower ;
Delight me with thy wandering hum,
And rouse me from my musing hour.
Oh ! try no more those tedious fields,
Come taste the sweets my garden yields ;
The treasure of each blooming vine,
The bud and blossom all are thine."

Successful bee-keepers take bee-papers and keep posted in their business, wisely says an exchange.

This Number is almost a convention number, but you will find much of interest in the reports of proceedings. Sisters Harrison and Stow say some real sweet things in their essays. Read them.

Have You Learned anything of value to the pursuit during the past season? If so, why not write out your experience, and thus help some other member of the fraternity? The BEE JOURNAL columns exist for the very purpose of recording in permanent form just such valuable information as you may now be able to give. Let us hear from *you*.

Bro. Hutchinson, in the October number of the *Review*, makes this kindly and congratulatory reference to the recent improvements in the appearance of the BEE JOURNAL:

The AMERICAN BEE JOURNAL, the "old reliable," the oldest bee journal in the country, shows no sign of decrepitude. It comes out with a brand new full-page illustration on its front page, and at the head of each department of the paper is a characteristic illustration. Such signs of prosperity and enterprise are very pleasant to see in a deserving journal like the AMERICAN BEE JOURNAL.

Poor Seasons come to the farmer and horticulturist as well as to the bee-keeper. In fact, there is no business in the world that has not its "ups and downs," at some time or another. You may be passing through the very kind of an experience that is best for you, if you could but realize it.

The future in many a man's life has looked dark and full of evil forbodings, but when he reached that dreaded time, what seemed like insurmountable barriers, or "lions in the way" of his progress, had vanished, and an apparently beclouded future proved to be radiant with the smiles of sunshine and happiness. Don't be discouraged, but rather look about you and draw inspiration and encouragement from the fact that others whom you may see and know are worse off than yourself.

Riches and prosperity do not always bring to their possessor the greatest

peace and joyfulness of heart. Then, again, there are other "riches" that invariably bring a wealth of happiness and contentment to those who are so fortunate as to possess them.

It pays to cultivate the habit of looking on the bright side of things instead of continually on the dark side. Seldom is one so poor and miserable but that he can find some one else who is poorer and more unfortunate. Prepare yourself during dull and discouraging seasons in life in such a manner that when prosperous times are at hand, you may be the better able to take full advantage of them, and thus be prepared to swing through unfavorable times thereafter, should such appear again. Have hope. Have courage. Have faith!

A Large Photograph of the apiary of Mr. S. B. Strader, of Bismark, Ills., has been sent us by Mr. S. It is beautifully situated in an opening near a delightful grove, which gives it a restful and pleasing effect. We have placed the picture in the BEE JOURNAL album, along with similar apiarian views.

Mr. Strader says in a private letter, which we received after writing the above paragraph, that the location of the apiary is in a valley between two hills shown in the picture. The hives face to the east, and at the north side of the yard the honey-house is shown, which was built for the purpose of keeping bees on the hillside.

When Renewing your subscription to the BEE JOURNAL, please send the names of those around you who have bees, and we will send them free sample copies. Then afterward you can get them as new subscribers, for which work we offer some excellent premiums in each number of the JOURNAL. While thus helping yourselves, you will also be helping others. Why not begin now?

Be Sure to read offer on page 611.

Magnitude of the Queen-Trade.—In the October *B.-K. Review*, the editor requested queen-breeders to report the number of queens they had reared the past season, and here is what they report, our friend, Mrs. Atchley, heading the list:

Atchley, Jennie, Floyd. Tex.	2,800
Bankston, C. B., Thorndale, Tex.	700
Compton, W. A., Lynnville, Tenn.	120
Case, J. B., Port Orange, Fla.	745
Doolittle, G. M., Borodino, N. Y.	712
Frazier, W. C., Atlantic, Iowa.	150
Green, J. A., Dayton, Ills.	296
Golden, J. A., Reinersville, O.	77
Hicks, C. M., Hicksville, Md.	175
Kildow, A. L., Sheffield, Ills.	141
Leininger Bros., Ft. Jennings, O.	800
Lockhart & Co., F. A., Lake George, N.Y.	500
Michael, J. F., German, O.	300
Moore, J. P., Morgan, Ky.	680
Mott, George, Spurger, Tex.	250
Nebel & Son, Jno., High Hill, Mo.	1,180
Pike, D. A., Smithburg, Md.	337
Quigley, E. F., Unionville, Mo.	297
Thies, Chas. H., Steeleville, Ills.	568
Trego. S. F. & I., Swedona, Ills.	949
Total...	11,715

Clipping Queens' Wings.—A friend of the BEE JOURNAL has kindly called our attention to a clear case of "copying" an article from a book, and then claiming it as original. He says:

I wish to call you attention to an article purported to be written for the AMERICAN BEE JOURNAL, on page 534, which is an exact copy of page 235 in the "A B C of Bee-Culture," 1891, entitled, "Shall We Clip the Queen's Wings?" and also part of a contribution by Mrs. A. L. Gould, on page 236 of the same edition. By comparing the two you will easily see that I am right.

Although I do not subscribe for the BEE JOURNAL, I read it with a friend, and as soon as I read the above-mentioned article, I knew I had seen it somewhere else. Cannot you give Mr. Root credit for that article? It is a clear case of plagiarism.

Certainly; we are glad to give the proper credit, though it is a little late. It shows that Bro. Root's "A B C of Bee-Culture" is highly prized, when any one will attempt to claim as original something taken from it, for most literary people like to put out a good thing for the reading public. We are sorry we did not notice the plagiarism before publishing the article.

Chicago's Great Week.—Chicago wants the Earth, and week before last it looked as if she were going to get what she wants. The city put on gala dress. Huge sky-scrapers, some of which are as homely as they are tall, came out dressed from sidewalk to flagstaff in the gayest of colors. The buildings of the city caught the infection of the hour and of the populace, and appeared attired for the occasion. Terra cotta and red, white and blue vied each with the other for the best seats in the synagogue. The price of 15,000,000 pounds of honey were spent in covering the nakedness of inanimate building material. How many pounds of honey went down the throats of voters in the form of "old rye" diluted, while this bunting waved, deponent sayeth not.

It was a great week for Chicago, and the world and his wife who were her guests. Notables stepped on each other's toes in street and hotel corridor. Generals and diplomats and cabinet officers were more numerous than the festive summer drones in the average apiary.

On Friday, Oct. 21, the buildings of the World's Columbian Exposition were dedicated. The representative of the AMERICAN BEE JOURNAL was in attendance, to see if perchance the orators of the day would by chance drop into some poetical or figurative reference to wax foundation or beeology. But the honey-mouthed Chauncey Depew and the fiery Kentuckian—Henry Watterson—did not thus digress. Into the largest building on earth our reporter carried his quill and note-book in vain.

There, with nearly thirty acres of good-natured humanity stuggling for the possession of 75,000 chairs, our representative waited and watched for the hour of opening. When it did come, nearly 100,000 white handkerchiefs waved the Chautauqua salute, and for an instant the forest of faces became a field of white clover. At this instant it was estimated that one-eighth of a million of people were in the great "Manufacturers and Liberal Arts" building. But at this point the reporter dropped his quill, for fear that soon some distant reader might intimate that he (the reporter) lived in Chicago.

The Dairymen's Association of Illinois have issued their 18th annual report—a book of about 240 pages, bound in cloth. Through the kindness of Mr. W. R. Hostetter, of Mt. Carroll, Ills., the Secretary of the association, the BEE JOURNAL has been favored with a copy, which contains the proceedings of the convention held at Kewanee, Ills., on Feb. 24, 25 and 26, 1892.

Mr. J. M. Jenkins, Wetumpka, Ala., we learn through a good friend of ours, is to be married "in a few days" to a most excellent lady of Little Rock, Ark. We wish to congratulate them in advance upon their evident mutual good fortune and glowing prospects.

Convention Notices.

IOWA.—The Eastern Iowa Bee-Keepers' Association will meet at Maquoketa, Iowa, in the City Hall, on Dec. 14th and 15th, 1892. All are invited. FRANK COVERDALE, Sec.
Welton, Iowa.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m. on Monday, Nov. 28, 1892. All bee-keepers are invited to attend.
Friendship, N. Y. H. L. DWIGHT, Sec.

MISSOURI.—The 7th semi-annual convention of the Missouri State Bee-Keepers' Association, will be held at the Court House in Independence, Mo., on November 17, 18, and 19, 1892. An Interesting and well-arranged programme has been prepared, and we extend a cordial invitation to all bee-keepers to meet with us in this very important convention.
W. S. DORN BLASER, Sec.
Higginsville, Mo.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

Winter Quarters for Bees.—Mr. B. Taylor, of Forestville, Minn., in the *Farm, Stock and Home*, recently gave the following advice regarding the preparation for bees in winter:

The time is about here when it will be in order to put the bees in their winter quarters. In this climate, where the temperature is likely to fall ten or more degrees below zero, some kind of protection to the hives is necessary to insure safe wintering. We find a good cellar is cheapest and best. Bees may be wintered on their summer stands, with outside cases set over the hives, and a space of three or four inches left between them, filled with dry sawdust or chaff.

The vegetable cellar is all right, where there is room to set the hives in some quiet corner, and keep them dark by hanging old carpets, quilts or wrapping-paper around them. The hives should be raised from the bottom-boards by making a rim of two-inch strips, the size of the hive, and placing between the hive and bottom-board, leaving an entrance the entire length of the hive open at all times, as bees will not do well when so confined to their hives.

The best cover for the top of hives that we have tried is strawboard building-paper cut in pieces one inch larger than the top of the hive, and kept in place by tacking some small strips of wood around the edge to keep it tight. This will keep the heat from escaping, and give all surplus moisture a chance to escape by drying through the single thickness of paper. There should be no solid cover on the paper, as that would cause the paper to retain moisture.

No colony should be put in quarters with less than 20 pounds of sealed stores. Prepared for winter in this way, there is but little danger of loss in the Northwestern States.

The first of November is the proper time to place bees in the cellar in the North

The Ant and the Bee are amusingly yet profitably compared in their spheres of life, in an article by Rev. A. B. Austin, who wrote it for the *Epworth Herald*. With the exception of the error made in "sex," especially when speaking of the bee, we are inclined to believe that the writer has about the correct idea of what he undertakes to say. As "variety is the spice of life," and as bee-keepers want to know what is being written about their favorite "pet," we here present Mr. Austin's views, without further comment:

THE FAVORITISM OF THE FLOWERS—A SOCIAL STUDY.

The ants have a grievance. They claim that there is nothing fair in the distribution of the world's honey. If "there were any equity stirring," the toilers of the insect world would get the largest share of the sweets of life. As it is, they get nothing. They know no greater delicacy than honey, and no greater rarity.

Nor is their grievance groundless. If the truth were told, the ant is the victim of unjust discrimination. In point of industry he is not inferior to the bee: only in the circumstance of birth. Both are suitors for favors in the gift of the flower. But the ant finds every door shut in his face, while the bee is welcomed with open arms. All this happens, of course, in accordance with Nature's laws. Talk after that about her justice! Here is an instance of the baldest class legislation. Who dare say, as matters now stand, that all insects are equal before the flower?

Let me cite an instance of partiality: Darwin tells us that the beauty and the fragrance of the flower are not for our benefit, as we, in our lordly self-conceit, are accustomed to think, but are simply a tinted and scented note of invitation to Rev. Mr. Bee to call and tie a knot at his earliest convenience. Mr. Primrose is in a quandary. The object of his affection lives only a stone's throw away, but neither can stir an inch from the other. They are so near, and yet so far. A happy thought strikes them. They will engage the services of Rev. Mr. Bee as a go-between. The functionary joins their hands, and receives from each a walletful of honey as his fee. It is a short ceremony, and easily performed, and yet on the strength of

it, Bee is immensely popular with the flowers; and flowers, you know, are at the very top.

But because Ant neither can nor will do such jobs, he is in bad odor with with them. He has no time for it. He is a common carrier, and none the worse for that; the world's carrying is as important as its marrying. If flowers want their knots tied, they must get somebody else to do it—he is not ordained. Still, he argues, and certainly with some show of reason, that this ought not to be used against him. Had he been born with wings he might have been as serviceable in this direction as Bee. No one ought to be condemned for the limitations of birth and capacity.

But the flowers are too absurd to listen to reason. The poor working ant receives from them nothing but lofty contempt and disheartening rebuffs. Think of the obstacles thrown in his way when he sets his heart on honey. The first plant he attempts to climb has leaves which encircle the stalk at their base, forming a cup, which the dew and the rain keep full of water. Ant encounters their breastwork from below, and clambers bravely over it only to find himself at the brink of a lagoon he cannot navigate. Meanwhile Miss Blossom, "in her moated grange," looks down upon him with patronizing disdain, as if to say: "You should have known your place. Between me and you there is a great gulf fixed."

The next plant has turned its leaf cup upside down. It meets him in his toilsome ascent like a raised umbrella, the underside of which is so slippery he falls off every time he reaches it. At this provoking juncture Bee comes sailing by, lazily humming, "There's room at the top." So there is—for the fellow who can fly.

A third rebuff is more tantalizing still. The flower permits the ant to come within sight of the honey, but there confronts him with an abattis of bristles as fatal to an attacking party as the Austrian spearpoints to Winkelried.

Length of limb and tongue is as useful in the acquisition of honey as length of purse in the acquisition of money, and many an ant has had to reluctantly abandon a cherished enterprise for lack of capital. Indeed, he seems doomed to do business in a small way. If he attempts to rise, he is frowned upon as an interloper; if, by any chance he should succeed, he would still be only a *parvenu*. What wonder if he concludes that this world is a hard place for the plodder; or if his soul rankle with hatred for the flowers "who have this world's goods, and behold their brother in need, but shut up their compassion from him!"

Still a word must be spoken in apology for the flowers. To see grounds of extenuation in them requires no greater stretch of charity than Burns showed when he saw hope of amendment in the devil. It is too much to expect magnanimity in them. They are but flowers, and know no better than to confine their favor to those who can do them favors in turn. Being but flowers they are not troubled with compunctions of heart when they cut the fellow who walks and cut the fellow who rides. Being but flowers they see nothing wrong in allowing a suitor to advance almost within reach of the prize before they crush him with a negative. What might they not do if they were human!

The Song of the Golden-Rod.

I have set my lights on a thousand hills,
I've illumined field and lane,
To guide you out of the summer-land,
Into autumn's grand domain;
For the days are sweet, in this sunny realm,
They shine with a glory, all;
So, come, I will show you, oh, weary ones,
The way to this kingdom of Fall!

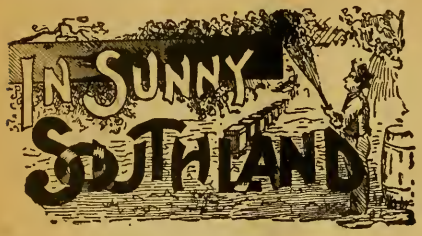
There are asters waiting beside the brooks,
There are grapes in the sunny dells,
And a crimson light in the apple trees
Where the wren's soft choral swells;
There are nuts grown tawny with many suns,
In this kingdom grand and free,
And they all shall be yours, my weary friend,
If you seek this realm with me.

Ah, ye who have borne the summer's heat
Through its weary hours—oh! see—
I have set my lights on a thousand hills,
To guide you by lanes or by lea,
Safe into the wonderful kingdom of Fall,
All glowing with color and light;
Where the harvester's song lulls the weary to rest,
And an Eden-land bursts on the sight!

—Good Housekeeping.

The Globe Bee-Veil, which we offer on page 613 of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, at $1.00 each.

Read our great offer on page 611.



CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Producing Honey and Rearing Queens

1. Is it profitable to combine honey-production with queen-rearing in the South?

2. Is it profitable to produce comb honey in the South?

Thorndale, Tex. C. B. BANKSTON.

I think it will pay to combine honey-production with queen-rearing, provided you do not run either too extensively, so that your time might nearly all be taken up with the one, and the other be neglected. But you might make both profitable, and then you have "two strings to your bow," so that if one should fail, you would have the other to fall back on. Don't you see? I don't think it sound policy to bestow all our labors upon one occupation, but mix up a little, and we have more chances to get a living, and the result will be less failures.

I am a poultry fancier, but my whole time has lately been taken up in the apiary, so my poultry must go; but I produce some honey, and raise our vegetables, and enough corn and oats for my cows and horses; in fact, we usually raise our bread and meat at home, then we are more sure to have it.

2. Yes, I do think now that it will pay to produce comb honey in the South.

Bee-Keeping in North Carolina.

I do not think we have many intelligent bee-keepers in North Carolina. I have not been keeping bees very long for myself, but I have been with them all my life, as my father kept bees, but he kept them in the old box-hives, and robbed them once a year, and that is about all he ever did to them. If they died, it was all right, and if they lived it was so, too. However, he generally kept a great many, and got a great deal of honey, even if he did not give them any attention. Most bee-keepers in North Carolina to-day are keeping them just as he did.

For the past two years I have been trying to post myself by reading the different works on bees, such as "Cook's Manual," "Doolittle on Queen-Rearing," etc. I have about 18 colonies in Simplicity hives, and thought I would get some pay for the work and attention I had given them this season, but I have not taken any honey at all, I might say; and, besides, almost all of my bees are now in very poor condition, and will require a great deal of care and attention to keep them alive until spring.

Just across the street from me is a very old man who keeps bees on nearly the same principles as my father kept them years ago—possibly he has made a very few slight improvements—and he is about 70 years old. He told me he never saw such a poor season in all his life. In the spring, when our honey-plants were ready, it rained all the time, and the bees could not do anything. Sometime in May, when fruit and blackberries were in bloom, I put on my hives about 500 one-pound sections, and the bees started off in all of them in grand shape, and I was so much encouraged; but the rain commenced, and kept up all the spring and first part of the summer, and the bees got the sections just about half full of comb, then stopped, and have done nothing since. Usually at this season of the year we have a good flow from what we call "aster-weed" here, but it seems to be very much taller than usual this season, and the bees have not done anything at all on it yet. Very soon now it will be too cool for them to do anything with it, if it does open.

I will try to keep just as many of my bees alive as possible, and see what they will do another season. I have had to feed some of them all along since July 25. My mother is living with me, and she is very old, and laughs at me for feeding bees in the summer time. She says she never heard of such a thing.

In the mountain sections of our country, which is about 75 to 100 miles above us, the bee-keepers are not as bad off as we are here, as they have taken some honey, but nothing like our average crop. Those people up there are all the old-time bee-keepers, and it is funny to see some of their honey when they bring it to market. From the looks of it, we presume they use only the box-hives, and they just cut out anything as

they come to it, and put it in a can or a bucket, and send it to market just as they come to it—white, black, pollen, young brood, and all together. If these people were "up in the business," they could make money out the business, as the quality of the honey coming from this locality is very fine in color and flavor.

I want to ask what I must do with the sections that are on the hives partly filled with comb. If I stack them in a dry cellar, will the combs keep, and be all right to put on again next spring? Some of the sections are full of comb, but most of them are just about half full. F. B. EFIRD.

Winston, N. C., Sept. 12, 1892.

Friend E., you can leave the unfinished sections on the hives until it is too cool for the moth to attack them, then store them in a dry place until needed next season. Then put them on the hives and see how nicely the bees will finish them up when they get honey sufficient. They will look just about as well as those built on new starters, only the wood may be a little more time-stained, or weather-stained.

The Season, Wintering and Shading Nuclei, Etc.

Miss F. M. McKnight, of Eustabuchie, Miss., says that it has rained so much that the honey crop is almost a total failure in her locality, and that the prospect for a fall crop was by no means favorable.

Our chances for a fall crop here are very poor. We were expecting a flow from cotton bloom, but the worms came too soon for us; however, the broom-weed is yielding enough to make queen-rearing run smoothly.

1. How do you winter nuclei? I wintered a few of them in little Alley hives last winter, on the summer stands, without protection. I lost about half that I tried to winter.

2. Do you shade nuclei? If so, what kind of shades do you use? I think that shades are necessary in this hot country.

3. How many cells do you allow one large colony to build in practicing the Doolittle method of rearing queens?

4. Does your nuclei ever swarm out? If so, have you found a remedy for it?

C. B. BANKSTON.

Thorndale, Texas.

1. In the first place, I do not use the little Alley nuclei, for it is hard to keep bees in them in summer. Yes, I often winter nuclei, but they are four frames of the Langstroth pattern, and they winter as well for me as a larger hive.

2. I hardly ever shade the hives at all, but I keep them painted well, with white lead and oil, and I usually cloud them in the manner described sometime ago in the AMERICAN BEE JOURNAL. But, in a very warm spell in July and August, it may be better to shade them. I use odds and ends of boards for shade, when I use any shade, as I do not wish to have any vines or shrubs around to be in the way.

3. I usually have about 10 to 12 cells built out by one strong colony. I find that some bees will complete twice as many good cells as others; but when I get ten good, large and long cells built out by one colony, I call it good.

4. My nuclei seldom swarm out now. If they do, my remedy is plenty of bees and honey, for if they become short of stores, and get weak in bees, they will usually swarm out, and do no good.

Getting Rid of Laying Workers.

There has of late been a good deal said about laying workers. It may be of interest to some to know my plan of getting rid of them. I have two plans, which are very simple and easy.

1st. When you find you have laying workers, let them alone until they have brood nearly ready to cap, then take a queen-cell ready to cut out, wrap some tissue paper around it (except over the cap) to protect it, then lay it under the quilt on top of the frames. Be careful to disturb the bees as little as possible.

2nd. When the brood is ready to cap, place a lively nucleus close by the side of the hive containing the laying worker, having them face the same way. Let them remain a day or two, then remove the combs from the hive, extract the honey, if any, and place the empty combs in the nucleus.

Now move the hive back a little, place the nucleus in its stead, after which carry the hive some 15 or 20 steps to the rear of the old stand, take the cover off, shake the bees on a paper or sheet, smoke them, and in a few minutes they will all return to the old stand, and unite with the nucleus, and in a few hours will be working as briskly as a new swarm.

Unless it be a good colony, it will not pay to waste time with them.

Deport, Tex. WM. H. WHITE.

Difference in Eggs of Impregnated Queen and a Virgin.

Query 843.—1. Are the eggs in an impregnated queen different in any way from those of a virgin? 2. If not, how do you account for impure drones when these queens are mated with drones of a different race? 3. If the eggs are in a different condition, then does not the theory of parthenogenesis, as applied to queen-bees, fall to the ground?—P. R. O.

I do not know.—James A. Green.

I leave this for Prof. Cook to tell us.—Mrs. J. N. Heater.

1. Yes, they are fertilized. 2 and 3. Too deep for me.—Eugene Secor.

1. No. 2. Don't know. 3. It certainly would seem so.—C. H. Dibbern.

This question is too much for me. I am not posted, in practice.—E. France.

1. I have failed to see any difference. 2. Your queen may be impure.—H. D. Cutting.

1. Not while in the apiary. 2. I don't account for it, neither do I believe it.—C. C. Miller.

The drone eggs are not affected by the impregnation of the queen. If the queen is pure blooded, drones reared by her will be pure also.—Mrs. L. Harrison.

1. The worker eggs are different, being impregnated, the drone eggs are not. 2. If the drones are impure, it is because their mother is impure. 3. Bosh.—R. L. Taylor.

1. I am not aware that the eggs *in* an impregnated queen are different from those *in* a virgin, until the eggs are changed by contact with the impregnating fluid. This answers 2 and 3.—A. B. Mason.

Without going into detail, I would say that I consider the drones from a mismated queen pure enough for all practical purposes; but for "breeding to the feather," I should want the drones to come from a queen which had mated with a drone of her own strain of "blood."—G. M. Doolittle.

1. There is no difference until after they are fertilized. 2. If the queen is full-blood—pure—her drones will be pure, although she may have met an impure drone in copulation.—J. P. H. Brown.

After they are laid they are, as they are impregnated, and will hatch workers or queens as well as drones, at the will of the bees. I don't see any "upset" to the theory of parthenogenesis.—James Heddon.

1. I think so. 3. The only part of the theory of parthenogenesis that is true is the simple fact that a laying worker or a virgin queen may lay eggs that will produce non-virile or worthless drones.—G. L. Tinker.

1. The supposition is that they are not, but are impregnated as they are laid. 2 and 3. These questions open up the whole theory of "parthenogenesis," which to-day is too well settled to allow of discussion as to its correctness.—J. E. Pond.

P. R. O. cannot cause the theory of parthenogenesis to fall to the ground by any such arguments. It has withstood worse storms than this. After P. R. O. experiments a little more fully, he will find that parthenogenesis is not a *theory*, but a *fact*.—Dadant & Son.

1. Certainly. 2. A virgin queen will produce drones (unsexed, or unfertile) without impregnation, and when fertilized she will produce perfect ones—showing a sexual connection; which answers your question. 3. They are the same eggs, under different conditions.—W. M. Barnum.

1. If I understand the question, I would say no; while the eggs remain in the queen there is no difference. 2. I do not account for it. It has not been proved that in a case like that there are any impure drones. Science says there are not, and experience has not proved the contrary. 3. They are not in a different condition, and parthenogenesis stands.—M. Mahin.

According to Dr. Dzierzon, they are not, but receive the fertilizing contents on its passage through the oviduct, and by the seminal sac or "spermatheca."

It seems from some provision of nature, that the drone-eggs never receive this seminal or impregnating fluid, hence the drone progeny is no blood kin to the father of the sister bees. A pure Italian queen will produce pure Italian drones, but if she be mated with a black or German drone, her female or working progeny will hybridized. Read Dadant's "Revision of Langstroth," pages 53 and 54.—J. M. HAMBAUGH.

1. *No.* 2. I don't account for them, as I don't think they exist. If the drones are impure, the queen was. How can any one swear that a queen is surely pure? Tainted drones show that she is not. I have tested this question very carefully, and to my full satisfaction. I will soon give an elaborate article on it for the readers of the AMERICAN BEE JOURNAL.—A. J. COOK.

1. There is no difference that I can tell by looks; but there certainly must be a difference. I will now state what I have been afraid to talk about, heretofore, viz: That a queen mating to a different race has a tendency to affect the drone as well as the worker. I may get a tongue-lashing for this, but I will tell you that my notion is that the bee-business wont run well on theory, no how.—MRS. JENNIE ATCHLEY.

1. This is getting to be a terrible question—like Bango's ghost, it won't "down." But I will give you my views on the subject. As the eggs are formed and developed in the ovary, there can be no perceivable difference whether grown in the ovaries of a fertile or unfertile queen. But all my experiments demonstrate to my intelligence, that the drone progeny of a virgin queen is *sterile*—while the drone progeny of the fertilized queen is *fertile*. Now when the virgin queen mates with the male, and her spermatheca is filled, she receives additional strength not only to produce drone progeny, but fertile drone progeny—and—and—. Please tell me how it is, or have me excused.—G. W. DEMAREE.

Your Subscription to the BEE JOURNAL—is it paid up to date? If not, please send to us a dollar for a year, and thus show your appreciation of our efforts in your behalf. Look at your wrapper-label, and if the date looks like this—"Dec91," that $1.00 sent to this office will make it look like this—Dec92.

Report of the Illinois State Bee-Keepers' Convention.

Written for the American Bee Journal
BY W. Z. HUTCHINSON.

(Continued from page 574.)

SECOND DAY—FORENOON SESSION.

After the address of welcome, President Hambaugh asked for criticisms upon the former report of the association, with a view to the improvement of future reports. He also called attention to the fact that somebody must look after the matter of getting a continuation of the $500 appropriation. He showed how important it was that bee-keepers write to their members of the legislature, urging them to vote for the appropriation.

Secretary Stone said that there were still copies of the report on hand, and money with which to pay postage. If bee-keepers, or their friends, wished for them, they could be had upon application.

S. N. Black said that a member of the Legislature almost sneered at him when he asked him to vote for the appropriation bill. He (Black) went home and wrote to him and several other members, long letters explaining matters. They were surprised at what they learned, and very willingly voted for the bill.

J. M. Hambaugh advised working in conjunction with the horticulturists.

J. A. Green—I approve of the views of Mr. Hambaugh, and would suggest that a copy of our report be sent to each member.

President Hambaugh said there was no danger but what the horticulturists, at least some of them, needed educating in apicultural matters. At a farmer's institute he had been put upon the programme for a talk upon bees. In the course of his remarks he alluded to the value of bees in fertilizing blossoms. Some were astonished, and one man was inclined to take issue with him.

Frank Benton suggested the getting from each county a list of the honey-

producing flora of that locality. From these reports could be made a sort of floral map of the whole State. An inquiry in regard to the honey-producing value of any part of the State could be easily answered.

In regard to affiliation with other associations, Mr. Benton thought it a good thing. He would have the small associations within the State affiliate with the State association, and the State association with the North American. He would have each association send a delegate from each State association, and the result would be that the attendance at the North American would always be sufficient to secure reduced rates.

J. H. Larrabee had been gathering statistics from the whole United States in regard to the honey-producing resources of different localities, and getting up a map something like that suggested by Mr. Benton.

Request of the Illinois Experiment Station.

Mr. Thomas G. Newman offered the following resolution, which was adopted:

Resolved, That a committee of three be appointed to submit resolutions on the subject of our obtaining recognition from the Director of the Experiment Station of Illinois, and to ask for a share of the appropriation of the $15,000 from the general government for experimental purposes.

By vote, it was decided that Mr. J. A. Green should be the man that should be recommended for the position.

Adulterators of Honey.

Mr. M. H. Mandelbaum offered the following resolution:

Resolved, That this convention recommend to the publishers of the various bee-papers that they secure an affidavit or contract from all the firms quoting honey in their honey column, that they will not sell adulterated honey or beeswax, they knowing it to be such.

J. A. Green thought it scarcely a business thing. A firm that would adulterate honey would not hesitate to furnish a false affidavit.

Mr. Mandelbaum—You get the publishers to get such affidavits from dealers who quote in their columns, and if they continue to adulterate, our firm will attend to them.

Thomas G. Newman—It is possible that Mr. Mandelbaum has struck a scheme whereby we can reach the adulterators.

The resolution was adopted, and W. Z. Hutchinson instructed to bring the same matter before the North American at its next meeting.

Mrs. L. Harrison, of Peoria, Ills., read the following essay upon

The Most Important Function of the Honey-Bee.

What is the most important function of the honey-bee—the production of honey and wax or the fertilization of flowers?

In the account of the creation, as given in the book of Genesis, the command was to multiply and replenish the earth, and that every plant should bring forth seed after its kind. There is harmony in nature, and there is always an appointed means to accomplish a desired end. Plants cannot walk like animate nature, therefore there must be a foreign agent to carry a message from one to another.

In some families of plants, as the grasses, cereals, palms, and of our forest trees, the lone missiles are carried by the wind, and many times for great distances.

In other families of plants, insects are the appointed agents to perfect this union. In California the Smyrna figs do not bear fruit, because their fertilizing agent has not been imported. Neither does *Dicentra spectablis*—that beautiful flower so much admired—bear seed, for its moth has never been brought from China, its native habitat.

Since the time Adam and Eve dwelt in the garden of Eden, the honey-bee has been his companion and co-worker, as the special agent for the fertilization of cultivated crops. When this continent was discovered, there were no honey-bees, for the wild flowers and grasses did not need their agency; but when the white man came, bringing his little fruit trees and seeds with him, then "the white man's fly" appeared. There were a few insects that fertilized the bloom of wild apples and plums, but they were few and far between.

During the blooming of the fruit trees, if there are no honey-bees, there will be but little fruit set. This was exemplified the past season, for during its bloom there were long-continued rains which washed off the pollen, and confined the bees to their hives.

CLOVERS (*Trifolium*).

This is a family of plants of such great value to farmers and to the people at large, that their worth cannot be over-

estimated, for he who has grass has meat; and he who has clover, has milk and honey. Clover makes an excellent pasture, and good hay, and one of the best fertilizers known, when plowed under in its green state. Mr. T. B. Terry, the great potato man of Ohio, enriches his fields by plowing under clover, and in this way obtains no seeds of noxious weeds. There are forty different kinds of clovers in this country, many of them to be found on the Pacific coast.

RED CLOVER (*Trifolium Pratense*).

This is the most valuable for soiling purposes of all the clovers, and is not dependent upon honey-bees for its fertilization, but upon bumble-bees (*Bombus*), as its tube-like corollas are too long and narrow for the bees to reach the nectar, where it is grown upon rich lands. If from any reason, either by drouth or poor soil, the heads are small, and the tube-like corollas short, the bees are able to reach the nectar, and the progeny of some queens have also a longer proboscis.

I would like to put in a plea for the poor, abused bumble-bees. The Australians discovered that no seed matured upon red clover, and imported bumble-bees, when they could grow seed in abundance. Notwithstanding their good service to farmers, they make war upon them continually, destroying their nests. Would it not be better to cover their entrances to their nests with screens, confining them in while workmen and horses are near, than destroying them? The first crop of red clover bears but little seed, for this reason, that there are so few bumble-bees early in the season, as only the queen survives the winter.

ALSIKE CLOVER (*Trifolium Hybrida*) AND WHITE CLOVER (*Trifolium Repens*).

Alsike clover is a first cousin to both white and red clover, and resembles them both. It yields more nectar than white clover, and is preferred by the bees. The first crop yields seed, and has the ability of taking care of itself, by re-seeding.

By cutting Alsike clover, just as it comes into bloom, it will then bloom in August, which will fill the interregnum between white clover and fall flowers.

The praises of white clover have been so aptly sung, that I do not feel able to add anything thereto. For these clovers, we are indebted to the honey-bees, for they would be rare plants with only an occasional specimen, if the bees did not fertilize the bloom.

SWEET CLOVER (*Melilotus Alba, Melilotus Officinalis*).

I do not think that the good qualities of these plants are known and appreciated as their merits demand. It is a biennial, growing in poor, rough, gravelly lands, adding to their fertility, and preventing washing. It adds a sweet perfume to hay when mowed away with it, and animals learn to relish it. It shows itself so early in the spring before other clovers, and is greedily devoured by fowls, and furnishes bee-pasture from June until frost.

HONEY AND WAX.

"My son, eat thou honey, because it is good," was uttered many centuries ago, by one of the wisest of men, and is just as good food now, as in the past. Chemists cannot manufacture it; Nature has her own laboratories in the corollas of flowers, and how it is distilled is one of her own secrets.

Honey is not only good for food, but is used by the *Materia medica* for the alleviation of ills which the flesh is heir to, as well as the sting of the bee, which is a powerful antidote for the alleviation of distress.

Chemists cannot manufacture wax—it is the secretion of the honey-bee, and is used in many ways in the arts and sciences.

After a careful revision of the functions of the honey-bee, the most useful to the world at large, is the fertilization of plants, and the bees should be the necessary adjunct of every country home. MRS. L. HARRISON.

J. H. Larrabee—I notice that Mrs. Harrison's essay says that cattle learn to like sweet clover, and I think she is correct about the matter. I think they do not like it until they *learn* to like it. At the college we made some silage from sweet clover, and a horse that had been accustomed to silage ate it quite readily, while some cattle not accustomed to silage would not touch it.

S. N. Black said that sweet clover would live several years if not allowed to go to seed. He had not been successful in getting it to grow.

J. A. Green advised the setting out of small plants. If they throve it would show that the conditions were adapted to its growth.

J. H. Larrabee—At the college we sowed some on both sand and clay. That on the sand died from the drouth when it was about two inches high. That on the clay lived and did well. This year it was so rank that a man would pass through it only with difficulty. I have never been able to secure any honey that I would pronounce pure sweet clover, but have had the bees get enough honey from sweet clover so that they would not rob.

J. A. Green had secured honey that was so clearly sweet clover that the sweet clover odor and taste were plainly discernable.

Mrs. N. L. Stow, of South Evanston, Ills., then read the following essay on

The Outlook for Apiculture.

The bee-keepers of Illinois are to be congratulated that they are represented by an organization that has started out with such flying colors—I was going to say, referring to that splendid piece of work, "The First Annual Report of the Illinois State Bee-Keepers' Association," but I will amend that, as there is nothing of show, or brag about it, but solid, practical work, that shows that the first association was made up of men well fitted to represent our industry in this grand State of Illinois, and that they have brains and wit enough to carry out any projects that will benefit, advance, or protect our interests.

But what of the industry itself? Will it prove worthy of its advocates, in face of three or four years of almost failure? Bee-keepers as a class are optimists, but "hope deferred maketh the heart sick." Will men advocate specialty now, as they did a few years ago? I think not. Monopoly is the great cry of the day in the business world, but, thank God, here we have something that cannot be monopolized any more than sunshine, fresh air and beauty, and all of God's best gifts to man. It is true they can be perverted, polluted, and adulterated, but honey is shed around us like the dew—Nature's own product any one may gather and eat—if they will only keep bees, and the season is propitious.

The time has been, doubtless, and may be now, in some favored localities, where large apiaries may be carried on successfully, but as our State becomes more and more densely populated they will be more restricted. Our cities and towns are growing larger, and the land outside of them is being used for market gardens to supply the inhabitants with vegetables. Our natural forests are being cut down to make room for more towns or farms, and even our swamps and marshy lands are being drained and cultivated, and land is land, and must be made to yield something to enrich its owner. No more weeds in the fence corners!

With two such cities as Chicago and St. Louis to feed, our State must become more and more a garden State. What, then, is the remedy and hope for apiculture? It is with the farmers, horticulturists, and small bee-keepers; let them make bee-keeping a part of their stock in trade, not as a "side-issue," to run itself if it can, but with intelligence, improved methods, and the right care at the right time.

But it might be said that swarming, putting on sections and taking off, comes just when a farmer is the busiest. Then let him do what has been done with marked success in many instances—bring out his wife, or daughters, to help him. Let them have more help in the kitchen, and they will, when once they are educated up to it, be glad to make the change. It is for this reason I have consented to fill this place to-day.

My experience proves to me that women can be valuable helps in the apiary, and, if they choose, *can* carry on the work alone, but as there is much lifting, and hard work about it, I would have them fitted to take charge of the work, or "boss" it, and call in help when needed. Let them see what a perfect piece of art a section of comb honey may be, and they will be enthusiastic to produce something like. Let them have bee-literature with the mutual benefit of exchange of notes and ideas, and *most especially an interest in the profits*, and instead of the complaint that farmers and small bee-keepers break down prices, the State will soon depend upon them for its honey.

So, then, it may be that the great underlying hope of this most honorable industry, as of much that is good in the world, rests in our women. Give them a chance. MRS. N. L. STOW.

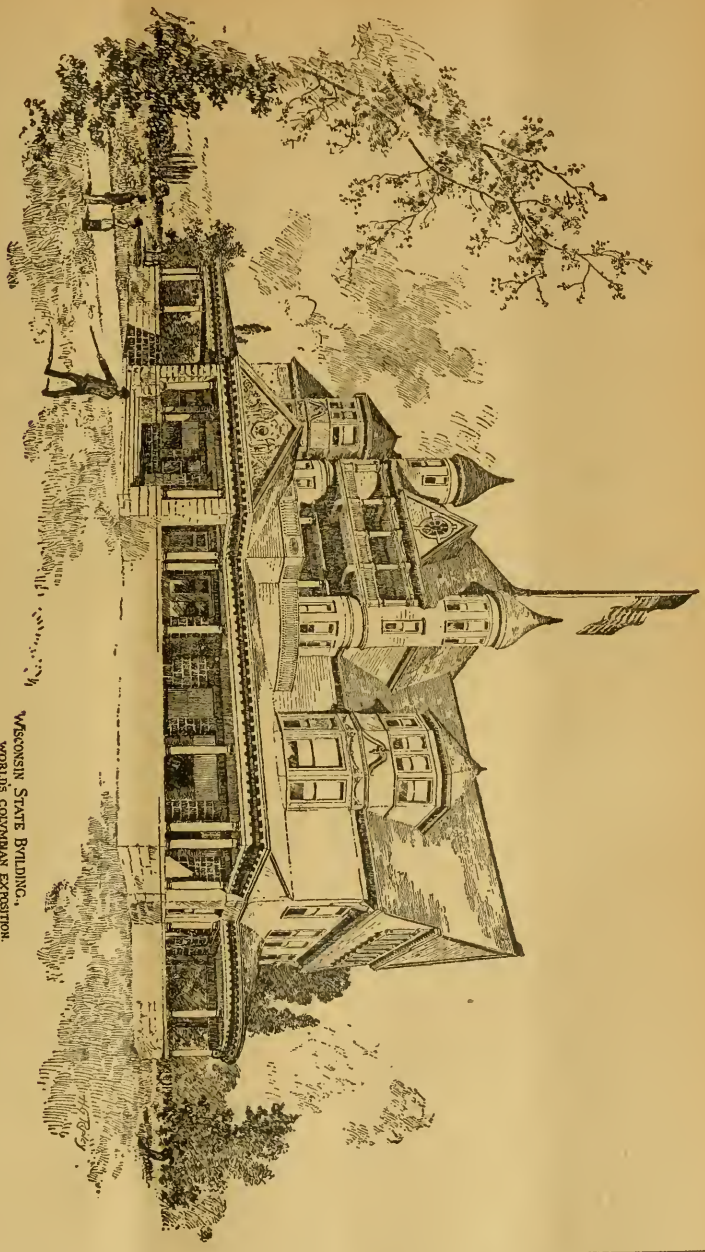
(Concluded next week.)

Report of the Colorado State Bee-Keepers' Convention.

Compiled from Newspaper Reports.

The Colorado State Bee-Keepers' Convention met in Longmont, Colo., on Sept. 28, 1892.

President E. B. Porter, of Longmont, called the convention to order. Prayer



WISCONSIN STATE BUILDING.
WORLD'S COLUMBIAN EXPOSITION.
WM. WATTS, ARCHITECT, OSHKOSH, WIS.

was offered by Rev. A. B. Thompson, after which Mr. R. F. Coffin, who was down on the programme for an address of welcome, excused himself and introduced Hon. B. L. Carr, who made a brief address extending the hospitalities of the city to the association. Mr. F. O. Blair, of the Trinidad *News*, responded. A musical selection was then rendered by Miss Booth and Mr. Knight, commit-

tees on award appointed, and the association adjourned to enjoy a most excellent spread of biscuit and honey and coffee, prepared by the Northern Bee-Keepers' Association.

At the afternoon session the following essays were read: "World's Fair Exhibit," E. Mileson, Denver; "Brood-Frames," S. M. Carlzen, Montclair; "Some of My Experience," Mrs. McDaniel, Arvada; "Comb Foundation," Walter Martin, Broomfield; "Foul Brood," by five county inspectors.

The display of honey was not large, but exceedingly attractive. That made by Mr. R. F. Coffin was the most noticeable, and was universally admired. It showed honey in every form, and the comb in many curious and fantastic shapes, the entire display being flanked by two great jars of milk, and the whole being suggestive of the fact that the country is overflowing with "milk and honey," as in truth it is.

THE BEE-INDUSTRY IN COLORADO.

Very few people in Colorado appreciate the extent to which the honey industry has grown. The first colony of bees was brought to Colorado in 1860, by Isaac McBroom, of Bear Creek, and the second by ex-Gov. Hunt, in 1866. Both colonies died soon after being brought here. In 1870 a carload of bees was brought to Denver, which brought $25 a colony. From this dates the beginning of the industry in the State. It did not really thrive, however, until the large sowings of alfalfa and clover began, and now Colorado is rapidly taking rank as a leading honey-producing State.

The State Association was organized in 1880, by J. L. Peabody, E. Milleson and Mrs. Olive Wright. At that time there were not to exceed 250 colonies in the State. In 1888 the Association was incorporated. In 1890 the Uncompahgre Valley Association was organized at Montrose, and in 1891 the Northern Colorado Association, at Longmont, was formed. The latter now numbers 73 members.

The second day's session opened with an increased attendance. Professor C. P. Gillette, of the State Agricultural College, spoke at length the previous night in regard to foul brood, illustrating his lecture with charts and microscopic specimens of the bacillus or microbe that is the cause of this disease. His paper was one of great value to the bee-keepers, and the association decided to have it published and sent to the absent members. After the Professor's address the newspaper reports that the honey crop of the past season was an average crop were severely criticised by a number of speakers, who placed the crop at one-third or one-fourth of the average.

This morning's session was devoted to the discussion of essays, prominent among which were "The Cause of Failure in Honey Crops," by D. L. Tracey, Ni-Wot; "Agricultural Notes," by Mrs. M. M. White, of Broomfield; "Bee-Hives" by E. B. Porter, of Longmont; "Bees for Money," by R. C. Aiken, of Loveland; and "The Honey Market," by Charles Adams, of Greeley.

At the afternoon session G. C. Miller gave an interesting bee-talk.

The committee of awards were as follows:

Honey—V. Devinney, A. D. Stryker, Dr. Cussman. Implements—A. Beeson, R. H. Rhodes, R. F. Coffin.

Secretary Knight's report showed that there are 64,000 colonies of bees in Colorado, Boulder county having 18,000. This year's honey crop is 1,760,000 pounds, which, at an average of 11 cents, will net $193,600. About $320,000 is invested in the industry.

NEW CURE FOR BEE-STINGS.

In a conversation with J. B. Adams, the Boulder county bee-inspector, he detailed a new cure for bee-stings that relieves the pain instantly. The inspector uses a disinfectant solution of a one three-hundreth part carbolic acid mixture to each pint of water, to which is added a table-spoonful of salt. Accidentally punching the business end of a bee, and feeling pretty warm when the bee sat down on him, he thought to cool the spot by applying some of his disinfectant solution, when, to his astonishment, every particle of pain left him. He has used it frequently since then, and it has proven successful in every case.

The following is the list of awards:

Section press—S. M. Carlson, E. B. Porter. Hive—Aiken Booth. Implements—A. M. Preston. Veil—R. H. Rhodes; ridiculous veil—A. M. Preston. Bee-escape—Aiken Booth. Queen-cage F. Ranchfuss. Comb honey—Walter Martin, Mrs. Booth. Extracted—R. F. Coffin, Aiken Booth. Largest display—J. B. Adams. Silver Medal—A. M. Preston. Ten sections—Mrs. Booth, Mrs. Plum. Observatory hive with bees—J. B. Adams. Artistic display—R. F. Coffin.

Report of the Capital Bee-Keepers' Convention.

Written for the American Bee Journal
BY C. E. YOCOM.

The Capital Bee-Keepers' Association met at Springfield, Ills., Oct. 4, 1892. The convention was called to order by the President, P. J. England, and the regular order of business was attended to. This being the day for election of officers, James A. Stone moved that the present officers be continued for another year, which motion was carried.

For some unaccountable reason, those who were to prepare essays to be read, were absent, but although there was not so large an attendance as was expected, some interesting matter was discussed, and a general good time was had.

PACKAGES FOR RETAILING EXTRACTED HONEY.

The question, "What is the best package for retailing extracted honey on the regular market," was asked. The subject was discussed by the President, James A. Stone, Geo. F. Robbins, Wm. J. Conkling, and the Secretary, all of whom recommended small packages holding one pound, and not more than two pounds each.

Messrs. Conkling and Robbins each exhibited a bee-feeder, both of which possessed features of merit.

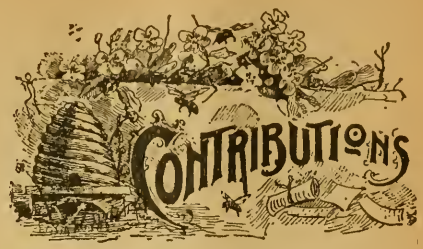
The Executive Committee was instructed to call another meeting of the Association in four to six weeks from date.

The convention then adjourned.

Sherman, Ills. C. E. YOCOM, *Sec.*

Extra Eight Pages were added to No. 17 to accommodate a few premium pages. Look at every page and see if we do not offer something that you want. It will pay you to get some new subscribers for the BEE JOURNAL, and secure one or more of the premiums.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 589, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present



Formic Acid—Its Origin, Uses and Effects.

Written for the American Bee Journal
BY C. J. ROBINSON.

In the sting of the bee, wasp, hornet, etc., a minute drop of a transparent liquid may be observed on the sting, and is called "bee poison" (formic acid). It penetrates the wound by the sting, and causes the well-known effects. As will be seen further on, it would be a great mistake to assume that the only object of this is to increase the effects of the sting, that is, that it serves only to injure. It has a far more important purpose, namely, to prevent fermentation and decomposition.

The celebrated bee-master, Holz, reported in his long experience with honey that which came from "rancorous swarms" (cross bees), had peculiar properties. It always had a harsh taste, and its smell was more or less like sting-venom. How can the character of the swarm affect the smell and taste of honey?

We do know this much—when bees are disturbed, they run out their stings, on the point of which may be seen a tiny drop. This little drop, as we have mentioned, is bee-poison, or true formic acid. When the disturbance is over with, they draw in their stings, but the little drop of liquid does not go back with it, but is wiped off by the comb, and eventually gets mixed with the honey. This explains how honey from overly cross bees must taste and smell sharper than from peaceable bees.

Excitable bees will rub off this little drop of formic acid more frequently than other bees; perhaps a larger drop is formed by nervous bees than by those not nervous in so high a degree, and thus it is that honey from nervous colonies, that have been often disturbed, is surcharged with formic acid.

This acid is never absent in genuine honey, but the amount differs, as before

indicated. This contamination with formic acid is, in certain respects, harmful as a dietetic, but highly useful—in fact, necessary not in excess, for it keeps the honey from fermenting as it does when diluted with water, or gathers damp.

We all know indeed, that honey treated with any process called "purifying," from which the formic acid has been removed, very soon ferments, while real honey, properly cared for, will keep unchanged for years. Nature duly arranged the matter, and inspired bees with the knowledge instinctively, and therefore they do not carry this drop of formic acid out of the hive. Bees always add the acid to nectar they collect, for the purpose of preventing fermentation. Nectar, as it is when first gathered by bees, is more or less watery, and would readily begin to ferment while in a temperature maintained in a hive were not bees provided with the faculty of secreting the non-fermentative formic acid.

Here I record my discovery of what I know to be a fact in Nature, well knowing, too, that none will believe my assertion or doctrine at present, with the superstition (believing without evidence) that exists by false notions. My assertion is this:

Pure honey, while in comb-cells, never is—never was—charged with foul brood virus, nor has such honey ever been the medium of conveying the foul brood virus from one hive to others. Of course I will be disputed in this, candidly, by most, if not all, other writers. Belief without evidence, is very common, and leads us into mistakes.

Some twelve years ago I set forth in an essay on foul brood that it is a "germ disease." The essay was read in convention, and Mr. D. A. Jones promptly responded thus by way of comment: "I don't believe foul brood is a germ disease."

Later, the report of the Northeastern Bee-Keepers' Association held at Syracuse, N. Y., on Jan. 9 to 11, 1883, records Mr. Jones as saying while discussing the subject of foul brood: "I do not believe there is such a thing as a parasite or living germ in foul brood. There are certainly two kinds of foul brood." This idea was entertained by most bee-keepers at that time. Later still, after Mr. Cheshire's announcement of bacteria in foul brood, Mr. Jones and other skeptics shouted "foul brood germs." Much more can yet be learned concerning foul brood.

Formic acid, or so-called "bee-poison," is a powerful antiseptic that kills the germs or renders them powerless to do injury, and those who have had experience with foul brood have observed that the disease does not make much headway in large colonies during active honey-gathering—the time bees are making use of large quantities of formic acid.

BEE-STINGS AND RHEUMATISM.

Bee-stings are often spoken of in current literature as a remedy for rheumatic affection, and numerous cures are adduced to prove it. If the formic acid can be looked upon as the principal agent in the cure, it would be worth while to try the experiment of rubbing the troubled spot with this acid, or injecting it under the skin by means of hypodermic syringe, so as to avoid the inconvenient method of applying live bees. Formate of ammonia (formic acid and ammonia) is a drug used by physicians in treating cases of nervous troubles, particularly of the head when not inflammatory.

WHAT IS FORMIC ACID?

Two hundred years ago formic acid was obtained from the brown wood ants, by tritulating them with water, and then distilling it. The same might be done with honey-bees. The acid liquor was used to irritate the skin as a counter irritant. The reddening of the skin, when using baths of pine leaves, is also due to the action of formic acid present in the leaves. The formic acid of commerce is formed by artificial distillation.

As regards the irritating action of stinging nettles and other similar plants, it depends, as already stated, upon its formic acid. The point of the nettle is as brittle as glass, and by the slightest touch penetrates the skin and breaks off, pouring out its acid and causing the burning sensation.

Some species of caterpillars have formic acid in some of their hairs, which they seem to be able to shake at will, and when a person touches such a caterpillar, the poison penetrates the skin wherever it is moist, and causes burning, itching and inflammation. These poisonous members preserve their irritating powers even after the death of the worm. This accounts for reliable statements that visitors to collections of caterpillars have suffered from exanthematus eruption on the neck.

Many hairy caterpillars cause itching and burning of the skin when touched, and sometimes it gives rise to swelling

and redness. This depends upon the fine hairs, which produce the same effect when they float around in the air. Many ladies who visited the caterpillar room of the naturalist Reaumer (the apiarist), had a breaking out on the neck.

Formic acid, according to the United States Dispensatory, diluted with an equal measure of water, is an excellent application to paralyzed limbs, exciting the circulation of the blood and producing exunt erythemathous redness, with a prickly sensation as if stung with bees or nettles.

Formate of ammonia has a specific tendency to the nervous centers, and is contraindicated in cases of any active irritation or inflammation of the nervous centers or about them. Those who handle bees should understand whether or not they are afflicted with chronic head or heart trouble, because such persons cannot safely expose themselves to any large doses of sting virus with impunity. But in cases of paralyzed limbs, or paralysis not complicated with head or heart disease, stinging may prove beneficial.

In conclusion, I mention that formic acid gets its name from the ant (*formica*), because it was *first* found in the ant. If it had been found first in the bee, or in the nettle, it would have some other name. If an ant runs over a piece of blue paper, it will leave a red mark. Put a stick in an ant-hill, and they will squirt strong formic acid on it.

Prof. August Vogel, of Munich, wrote on the subject of formic acid more than a decade ago.

Richford, N. Y.

Points on Removing Honey from the Hives, and Marketing.

Besides knowing how to manage bees, hives, and treat the honey, the bee-keeper must know how to get the most profit from his bees. It is one thing to produce a crop of honey, but quite another thing to sell it. The progressive bee-keeper of to-day must be posted in regard to the markets and manner of putting his honey on the market, as well as the more modern methods of producing it, if he would make bee-keeping as profitable as it should be.

There are two things that tend to, and do, depress the honey market, which can and should be avoided. First, the great bulk of honey that is put on the market in poor shape. We must have our honey put up in small sections, and in the most attractive style.

In order to have it thus, it is important to attend to it properly just as soon as the harvest is over, and get at least a part of it on the early market, as it always commands a better price than later in the season. Take the honey from the hives as soon as the main white honey season is over, and place it in a warm room with the temperature at 95° or 100°, and it will ripen just as well as if left in the hive. If left in the hive until late in the season, the bees begin to prepare for winter by filling every crevice and opening with propolis. The sections become travel-stained, and the honey gets dark, and no amount of work will make it as attractive as it otherwise would have been if taken from the hive as soon as the harvest was over.

The sections should be thoroughly cleaned, and labeled or stamped with the producer's name on them, and crated in neat crates with glass fronts, so it will present a nice appearance. Such a crate of honey is bound to sell at a good price.

Second, the lack of knowledge in regard to the price in the different markets. The latter is more prevalent among farmers and small producers. Many farmers will go to market and take just about what the merchant chooses to give them, when with a reasonable knowledge of the markets and demand, they could in many cases get much more for their goods. This not only does them an injury, but all the rest of the people who are engaged in the same occupation.

Always sell it in the home market if possible. It is risky to ship. Honey is an excellent article to retail. The retailers will not pay as much as they will to commission houses, besides freight, drayage, and the risk in shipping. If you have honey to sell, watch these points.—*Field and Farm.*

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Don't Fail to read all of page 611.

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Egg-Eating Dogs—Not Much Surplus.

For the benefit of Dr. Hachenberg (see page 538) and others, I will give from experience a sure cure to break a dog from sucking eggs. Grease an egg with hog lard, and put equal parts of turpentine and croten oil on the egg, and put it where the dog can find it.

Our honey-flow comes mostly in September. It was so dry that we did not get much surplus. Bees have plenty of honey to winter on. A. J. RICH.

Kenesaw, Nebr., Oct. 24, 1892.

Bees Well Supplied for Winter.

My bees have not done very well this season. Last fall I put into the cellar 24 colonies, and took out 23 alive in the spring, but they dwindled to 10 by the time they could get enough to live on and multiply, so this fall I have 20 strong colonies, and will have some 300 pounds of comb honey, more than half of which was gathered in September from heart's-ease. They are well supplied for winter. I have 3 colonies of Carno-Italians, and the rest are Italians.

D. C. WILSON.

Viola, Iowa, Oct. 21, 1892.

Wheat Turning to Chess—Challenge.

On page 538 of the last issue of the "Old Reliable," I notice that Mr. G. B. Replogle speaks of my last article as being "mythical," and on the line of "guessing." I will here say that all I have said about drones is actual experience, and no "myth" about it. I do not pretend to know everything about bees—if I did, I should feel sad to think there was nothing more for me to learn.

With reference to going to Ames, Iowa, I may frankly say that I am hardly ready to go over there and remain until harvest next summer, for the paltry sum of $25. Any agriculturist, bee-keeper or gardener who may be skeptical with reference to wheat ever changing to chess, can try the following experiment:

Construct a tank 10 feet square and 2 feet deep; fill the tank to the depth of 18 inches, with soil such as will be found in a thickly timbered forest where beech, sugar and elm wood grow. Prairie soil will not do. Select the soil where no tame plant has ever grown. Plant a single kernel or grain of wheat every foot apart, and keep the wheat perfectly clean. As soon as the wheat begins to stem, or stalk, fill the tank with cold water so as to almost keep the wheat covered with water. Once or twice a week the water can be turned off, and the tank refilled with fresh water. Some care must be taken so as not to keep the wheat wet enough for so great a length of time as to kill it. When the stalks are nearly heading, keep all water off, and see what you have produced, wheat or cheat. If the season be late, bunches of wheat may be transplanted from some field.

The above has reference to winter wheat. W. P. FAYLOR.

La Porte, Iowa.

Overwhelming Testimony for Italians.

The Illinoies State Bee-Keepers' Association has issued its first "annual report," and in answer to question 22 of Secretary Stone, "What strains or strain of bees have you? and which do you prefer?" sixty-five answers have been published. One prefers Cyprians; two, black bees; while 62 out of the 65 prefer Italians or their crosses. To be sure, there are a few Italian queen-breeders who answer, and as a Justice of the Peace I do not consider their testimony as free from selfishness, yet it might be truthful. But nearly all who have answered are honey-producers only so far as apiculture is concerned; but what an overwhelming testimony is there in favor of the blood of the Italian bee! JAMES HAMILTON.

Beason, Ills.

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Always State the Post-Office to which your paper is addressed, when writing to us.

Special Notices.

The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription to the *end* of next December:

Wallace Porter Dec92
Suffield, Portage co, Ohio

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

Nov. 17-19.—Missouri State, at Independence.
W. S. Dorn Blaser, Sec., Higginsville, Mo.

Nov. 28.—Allegany Co., at Angelica, N. Y.
H. L. Dwight, Sec., Friendship, N. Y.

Dec. 14, 15.—Eastern Iowa, at Maquoketa.
Frank Coverdale, Sec., Welton, Iowa.

1893.

Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

Fifty-Two numbers of the BEE JOURNAL for $1.00! Where can you find a cheaper, yet more valuable, volume of over 1,600 pages of bee-literature for that amount of money? You can't *afford* to do without it if you care anything for bees. It is worth two cents a week just to get a look at its "cheering face."

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED.—We want a printing press, and will trade Dov. hives for same. Let us hear from you. LEVERING BROS.,
18Atf Wiota, Cass Co., Iowa.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, October 22nd, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted. 6@9c,, according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—No. 1 comb honey, 16@17 cts. White extracted, 7½@8c.; dark, 6½@7c.
Beeswax—24@25c. J. A. L.

CHICAGO, ILLS.—Fancy white comb honey is selling at 17@18c.; second grade, 15@16c. Extracted honey, 7@8½c. Beeswax—26c. All the foregoing are scarce on our market, and in good demand. S. T. F. & C.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand good for all kinds of extracted honey at 5½@8c., according to quality. Arrivals not equal to demand. We dare not solicit new trade. Comb honey is scarce, at 15@16c. for best white.
Beeswax—Demand fair, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS. — Supply is very light. We are selling best White 1-lbs. at 18@19c. Extracted, 7@9c. B. & R.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Faucy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13 @14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied). white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—Comb is arriving freely, and demand is good. Fancy white 1-lbs. 15@17c.; 2-lbs. 13@14c. Fair white 1-lbs., 13@14c.; 2-lbs. 12c. Buchwheat 1-lbs. 11@12 2-lbs. 10c. Extracted—clover, basswood, and orange bloom, 7½@8c. Southern, 65@75c. a gallon. Beeswax—26@27c. H. B. & S.

ALBANY, N. Y.—Honey more plenty and market some lower on all grades except white comb, which sells at 15@17c.; mixed. 13@14c dark, 10@11c. Extracted, white, 7½@8½c.; amber, 7@7½c.; dark, 6½@7c.
Beeswax, 27@28c. H. R. W.

NEW YORK, N. Y.—Demand is moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5½@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c. F. G. S. & C.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted. 6@ 7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT, 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Advertisements.

FOR SALE.

NO. 1 White Clover Honey in 60-lb. cans at $5.00 per can. Buckwheat Honey, $4.25 per can, f. o. b. Correspondence solicited.
18A2t **H. L. ROUSE, Republic, Iowa.**

A Blind Man Can See

WHEN it is properly presented to him. Have you ever figured out how much you can save by shipping your products to a first-class and reliable commission house?

We are wholesale dealers and shippers of all **Farm and Garden Products,** including **HONEY and BEESWAX.** Write for quotations.

BANDOW & OWEN,
19D26t 178 W. Randolph St., CHICAGO. ILLS.
Mention the American Bee Journal.

D. NEEDHAM'S SONS
Inter-Ocean Building,
Cor. Madison and Dearborn Sts
CHICAGO,
RED CLOVER BLOSSOMS
And Fluid and Solid Extracts of the Blossoms. The BEST BLOOD Purifier Known. Cures Cancer, Catarrh, Salt Rheum, Eczema, Rheumatism, Dyspepsia, Sick Headache, Constipation, Piles, Whooping Cough and all Blood Diseases. Send for circular.
MENTION THIS PAPER.
17D4t *Mention the American Bee Journal.*

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., NOVEMBER 10, 1892. NO. 20.

Great Britain imported honey to the value of nearly $14,000 during the month of September.

Mrs. and Eugene Secor, of Forest City, Iowa, made us a very pleasant call recently. They just missed being at the Illinois State Bee-Keepers' Convention held in Chicago on Oct. 18 and 19, the report of which we close in this number of the BEE JOURNAL. Mr. Secor is well known throughout the apiarian literary world on account of his poetical as well as other interesting productions.

Father Langstroth has written his autobiography for *Gleanings*, which will be published in serial form, beginning with the number for Oct. 15th. The series tell in an interesting manner about "his early boyhood, experiences, and tendencies; short sketches of his college life, how he became interested in the study of bees, the circumstances which led to his invention that revolutionized bee-keeping, with here and there interesting reminiscences, charmingly told, of noted bee-keepers of the early days."

If you want to take advantage of this opportunity to read about the life of Father Langstroth, you can do so by sending us $1.75 for both the BEE JOURNAL and *Gleanings* one year. You cannot afford to miss this chance to get the best bee-literature at a nominal price.

A Correction.—On page 598, of last week's BEE JOURNAL, in Dr. Miller's answer to the question whether the eggs in an impregnated queen are different from those of a virgin, we made him say, "Not while in the *apiary*." Read *ovary* in place of "apiary," and you will see that the Doctor is still able to write sensibly. It was all our fault.

Charles E. Parks, Secretary and Treasurer of the G. B. Lewis Co., of Watertown, Wis., spent some weeks last month in California. While in Oakland, Calif., he visited J. W. McClymonds, city Superintendent of schools. Twenty years ago Mr. Parks and the latter gentleman taught schools in one of the Western States, and they roomed together and nightly swapped stories. To-day, Mr. Parks is a wealthy man, he being one of the owners of a large bee-hive and box factory. He has valuable patents on boxes, and is negotiating to establish a factory for making fruit-boxes in California.

Bees Flying in a Circle, Etc.—Mr. A, K. Osborn, of Elk City, Nebr., on Oct. 16, 1892, sent the following questions:

1. I noticed my bees flying in a circle around their hives last week, in the afternoon when it is warm. What are they trying to do? I had only a few bees until last spring.
2. What is good to keep those little worms out of the comb honey after it is put into the case? A. K. OSBORN.

Mr. J. A. Green replies to the above questions thus:

1. Bees like to go out for exercise or a "play spell" just as well as human beings do. Young bees for their first flights, or old ones if they have been confined to the hive for a time, act as you describe.
2. Kill the worms by burning sulphur, as has been described in these columns. Better keep Italians, and not have any worms in your honey. J. A. GREEN.

On page 456, Mr. Osborn will find how Mr. Doolittle fumigates comb honey. We have published various methods for ridding comb honey of worms, during the past month or so. It pays to read each number of the BEE JOURNAL carefully, as we cannot afford to occupy space with repetitions of simple methods and directions.

The Work Done by Bees is simply wonderful—like everything else about these interesting insects. In order to collect a single pound of clover honey it has been estimated that they must deprive 62,000 clover blossoms of their nectar. To do this the 62,000 flowers must be visited by an aggregate of 3,750,000 bees; or, in other words, to collect this pound of honey one bee must make 3,750,000 trips from and to the hive. As bees are known to fly for miles in quest of suitable fields of operation, it is clear that a single ounce of honey may represent millions of miles of travel.

What some specimens of humanity need, is to imitate the bee a little more in the line of its energy and "get there" characteristics. It never pays to mope, or idle away time. There is plenty of work for all, if only each one will find out for himself or herself the particular duties that he or she can do, and ought to do. Many avenues of usefulness are as yet unexplored, and simply await the opportunity to yield their hidden treasures to the one who will put forth the necessary effort to discover and appropriate them.

Ventilation and Wintering.—Mrs. P. Lattner, of Worthington, Iowa, asks the following questions:

1. I wish to know if the ventilation given bees in the honey season through the entrance would be too much for bees packed in chaff hives, or bees put into the cellar.
2. Also, which is the more profitable, wintering in chaff hives or in the cellar? MRS. P. LATTNER.

Prof. Cook, of Agricultural College, Mich., replies to the foregoing questions thus:

1. In the honey season, an opening the whole width of the hive, at least one foot long, I think none too much. I would not wish so much in winter, were I to winter the bees out-doors. I should restrict the entrance—at least to 4 inches—even in using a chaff hive. In addition to this, I should keep this entrance from clogging by preventing the ice or snow from forming or blowing over it, and by occasionally brushing out the dead bees, by use of a bent wire. In the cellar, on the other hand, I should prefer to have the entire opening unclosed; and if in addition I could raise the hive up from the bottom-board, so that dead bees would never clog the opening, I should be pleased.

2. I prefer the cellar—a good one—to chaff hives. First, I think it more reliable; second, in the long run it is certainly cheaper, and it makes it unnecessary to have the large, heavy hives. I am aware, however, that many of our best and most successful bee-keepers think differently. He is not wise who shuts his ears against the voice of success. Each person must decide for himself. I think, however, that in Iowa and Michigan the weight of opinion favors cellar-wintering of bees. A. J. COOK.

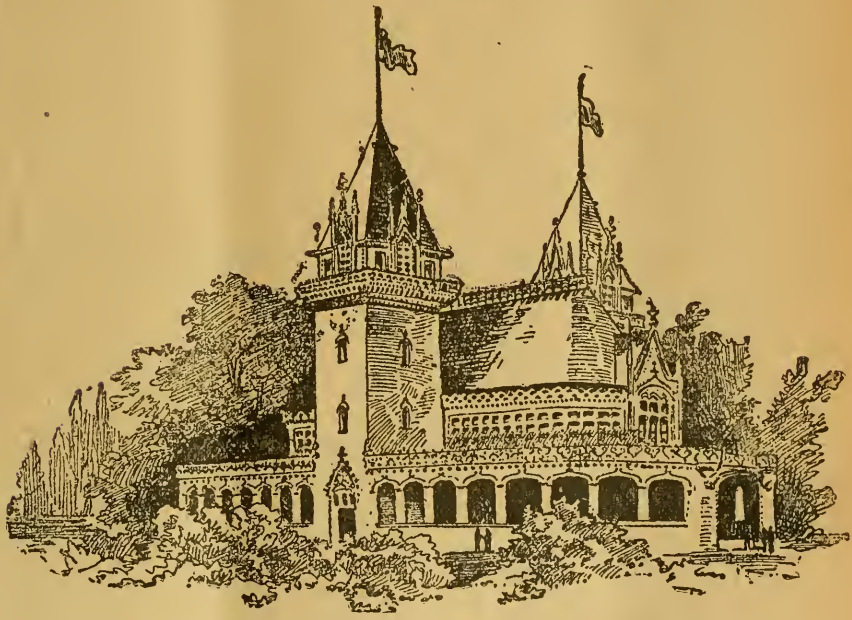
Mr. Allen Pringle, of Selby, Ont., has been appointed as Superintendent of the Canadian honey department at the World's Fair, to be held here next year. The *Canadian Bee Journal*, in its issue for October 15th, says this concerning this very popular appointment:

Out of the large number of Canadian bee-keepers among whom mediocrity is not known, it would not have been difficult to select many very competent men for the position; but it was a difficult work indeed to select from so large a number just the individual to whom none of the others could raise any insuperable objection on the ground either of practice or precept. Upon mature consideration we have reason to believe that Mr. Pringle's appointment will give very general satisfaction.

Mr. Pringle has accepted the appointment which has been so deservedly conferred upon him, and we are quite sure that no better thing could be done. He is in every respect the right man in the right place; few are better advised than he is in regard to the duties that will devolve upon him; none will be more active in their discharge; and it is safe to say that all who may have occasion to seek either his assistance or advice will have both administered to them in the most thorough and satisfactory manner possible.

Mr. Pringle is not only a practical apiarist, but is well and favorably known to the apicultural world by reason of his numerous and interesting contributions to the literature of bee-keeping.

Have You Read page 621 yet?



Indiana State Building at the World's Columbian Exposition, in 1893.

Insects and Music.—The tones of insects, as well as the songs of birds, have been reduced to musical notation. Gardiner, in his "Music of Nature," tells us that the gnat hums in the note A on the second space; the death-watch calls, as the owl hoots, in B flat; the buzz of honey-bees in a bee-hive is in F; that of the house-fly in the first space; the bumble-bee in an octave lower; the cock-chafer, D below the line.

Great Premiums in this issue!

Dr. Miller's Stray-Straws in *Gleanings* for Nov. 1st, are unusually "glistening" in their amber brightness. We "transplant" a few of his "straws" for the benefit of our readers who admire the "stray-stawing" Doctor:

Commission men, this year, are sending out, offering to *buy* honey. That tells its own story.

And now the AMERICAN BEE JOURNAL has gone to calling names—calls me a "stray-strawer." Et tu, Brute ?*

Henry Alley sounds a warning against introducing queens that produce five-banded bees. He says: "As surely as you do it, your apiaries will be ruined, and you will soon give up keeping bees, in disgust."

"The old reliable" AMERICAN BEE JOURNAL has washed its face, combed its hair, and put on a spick and span new holiday suit which it means to wear 52 times in the year. It is really gotten up in delightful manner.†

Non-smokers, in the last graduating class in Amherst College, have gained in weight 2¼ per cent. over the smokers; in height, 37 per cent.; in chest girth, 32 per cent.; and in lung capacity, 8 36/100 cubic inches.—*Medical News.*

E. F. Quigley says the cause of swarming is nature. Well, if that's all I guess we can manage it. It's nature to raise lots of drones, but we stop that by cutting out drone-comb. Now, tell us, Bro. Quigley, "what in nater" is the particular thing that makes the swarming, and we'll fix 'em.

I've been laid up with a lame back. To turn over in bed was exquisite torture. I've enjoyed it—enjoyed the thought that so little of my life I've been unable to get around, and the thought that I have such kind friends when I can't take care of myself. I might have forgotten it but for this little spell. I'm nearly myself again.‡

Does freezing hurt comb honey? Generally speaking, yes, very decidedly—cracks, granulates, leaks—in fact, frozen comb honey is generally ruined as a first-class article. But not always. I knew two cases, one in Illinois, one in Pennsylvania, where honey was frozen all winter in an attic without injury. But it had been roasted in that attic through the summer. At least *some* honey, if rich enough and thick enough, is not hurt by freezing.

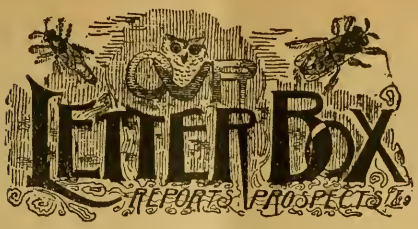
"Swarms without queens will not double up by going to a strange hive," says friend Dibbern. If he means swarms that have clipped queens, so that the queens cannot go with them, I'm sure the rule does not hold good with my bees. I can't see how it would make any difference whether the queen were fastened in the hive or tumbling around on the ground; still, facts cannot be disputed; and if it proves true in the case of self-hives, it's a big item in favor of hivers.

*We don't see what else Dr. Miller could expect, when he tries to "show which way the wind blows" by persisting in sticking out his "straws" for the wind to strike them. We think that must have been the first time he was ever "Yorked." We're just awfully sorry we called him such a hard name, and we'll stop whenever he quits "swearing back" in Latin.

†It must be that the Doctor thought the face of the "*Old* Reliable" was not only getting wrinkled with age, but was dirty, besides. Well, with its "hair combed" and "new suit" on, it *feels* just as it looks—happy and bright—like a fellow who has just proposed to his "best girl," and has been accepted. The Doctor may be can remember how *he* felt once in his life.

‡All present regretted the Doctor's inability to attend the Illinois State Convention, held a few weeks ago. We, as well as hosts of others who are Dr. M.'s friends, are rejoiced to know that he is nearly "himself again." When one is "laid up" with his "back down," as the Doctor was, about tne only thing he can "enjoy," we should imagine, would be just such a thought as was happily suggested to the manufacturer of "Stray Straws."

A Good Friend of the BEE JOURNAL attended a bee-convention recently, and secured as subscribers every member present, that was not already on our list. This shows what the right kind of work will do. Have *you*, reader, tried to get your friend or neighbor to subscribe for the BEE JOURNAL ?



☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees in Fine Condition.

The season here for honey is poor. Bees will go into winter quarters in fine condition. J. F. MICHAEL.

German, Ohio, Oct. 1, 1892.

Delighted with the "Bee Journal."

I am delighted with the much improved appearance of the "Old Reliable." It seems to have taken on new life, too. May its days be long and prosperous. The honey crop is only fair here.

A. L. BEACH.

Steel Creek, N. C., Oct. 27, 1892.

Report for the Past Year.

My report for the past year is as follows: Last fall I had 27 colonies, and last spring 22. My crop for this year has been 50 pounds of comb honey and 700 pounds of extracted. I have fed 200 pounds of granulated sugar for stores, and have 26 colonies now. The honey taken this year is dark.

P. P. CARTER.

Scranton, Pa., Nov. 1, 1892.

Secured a Good Crop—Beginners.

Some time ago I said I would report the outcome of the honey crop, and I am glad to say we had a good crop, for which I am thankful. We had a long dry spell, and the flowers did not yield as well as they would with rain. Almost all the bee-keepers say they got a fair crop of honey. I get 20 cents for full one-pound sections, and can sell all I can spare at that price.

I will now tell about two beginners that I sold each one a fine new swarm in a good hive. A day or two after I hived the bees I put them in a spring wagon and took them over to my friends, and told them what to do with them. They both got sections from me, and when the time to take honey came, the one man had 42 nice, full sections of honey, as he did as I told him. The other man did what I told him not to do—he robbed the brood-nest, drowned the bees, and had a muss. He put on the sections, but got nary a section of surplus. The one man reads the AMERICAN BEE JOURNAL, the other one doesn't read it.

SAMPSON STOUT.

Udall, Kans., Oct. 31, 1892.

Results of the Season of 1892.

I commenced the season with 26 colonies in fair condition, increased to 51, and took off 375 pounds of comb honey in one-pound sections, and extracted 675 pounds of honey, making 1,050 pounds in all, or about 40 pounds per colony, spring count. My loss last winter was 13 colonies, mostly with diarrhea. Thanks to James Heddon, I now believe in the pollen theory.

C. A. BUNCH.

Nye, Ind., Nov. 1, 1892.

Don't Fail to read all of page 621.

The Breeder and Fancier, formerly published at Bellevue, Nebr., has been moved to Omaha, where its enterprising publishers, Messrs. McDermut & Son, will find better facilities for handling its increasing trade. Their nice monthly is devoted to Poultry, Bees and Pets, and is in every way a splendid periodical.

In the department of "Bee-Gleanings," we find the following friendly paragraph which we assure the publishers is appreciated:

The AMERICAN BEE JOURNAL for Oct. 6th, comes to us with a bright, newly engraved title page, new department headings, and a general turning inside out, adding greatly to its typographical appearance. Bro. York is one of the progressive people, and is not only keeping the old AMERICAN BEE JOURNAL up to its high standard, but we are glad to note is also on the alert for improvement. We wish the JOURNAL continued prosperity.

Read our great offers on page 621.

CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Bee-Notes from Texas—Bee-Caves.

The prospect is good at present, in this part of Texas, for an average crop of honey. Our bees gathered very little surplus the forepart of the season, but now an average of 40 or 50 pounds per colony is assured. The fine rains in August made a splendid growth of the plants that produce our fall flowers.

The honey-plants now in bloom are broom-weed, with its small yellow flowers covering nearly all the pastures; then the aster family is well represented. The golden-rod is just beginning to bloom—I notice two distinct varieties of that.

There is also a wild catnip that is in bloom the whole summer, and the bees work on it considerably. The iron-weed is now in bloom, with its large, yellow, sunflower-shaped blossoms; and last, but not least, nearly all the cultivated land is covered with the wild morning-glory, or "tie vine," as it is often called here, because it "ties" the cotton plants together. I think the bees work almost entirely on it until about noon, when it closes up, and they then work on the other plants named. There is one more which is much sought after by the bees, which I almost forgot to mention, namely, the "rich" or frost weed, which yields a great deal of honey. Cotton is also still in bloom. All of these plants mentioned produce a very fair article of honey, and the bees are not able to gather a tithe of the honey which these plants produce.

I am afraid, Mrs. Atchley, you have missed it a little in regard to bee-caves. I tell you there are some "whoppers" in the bluffs of the Colorado river. The number of bees working in some of these caves is something wonderful to behold, and as they are so situated that it is almost impossible to get at them, we cannot tell how many different queens are in there, but certainly more than one, and I do not consider this very strange, if the cavity is large, which it is likely to be. As a matter of fact, the stream of bees that issues forth is immense, and as Rambler says, I have always thought there were "numerous" queens in there.

I will try to find time to investigate this matter, and will try to visit the bee-cave on the Colorado river 30 or 40 miles above here. A. C. ATEN.

Round Rock, Tex., Sept. 23, 1892.

Bro. Aten, in regard to the bee-caves, you are writing from hearsay, and I wrote from personal investigation. The same caves you speak of, are the ones I explored, and found them as stated in my former article; and I think that when you investigate for yourself, you will then agree with me exactly.

Honey from Morning-Glory, Etc.

We have had one of the best fall honey-flows I ever saw here, from morning-glory. Bees had not done much through the spring and summer—just gathering enough to keep them in good condition—but on Sept. 1 the "shower" came in earnest from this wonderful honey-plant. There was at least 3,000 acres of it in reach of my bees. One colony stored 80 pounds of surplus honey from it alone. This was my best colony. The honey is of the finest quality, as clear as spring-water, and the flavor is just splendid.

I have 200 colonies now, all in fine condition for winter. Wintering bees is no trouble here. All that is required is plenty of honey—15 or 20 pounds is enough—and they will winter in any sort of a hive.

About 15 years ago, when I first began keeping bees in the old-style box-hive, sometime in December a mule ran over one of the hives, and knocked it over. I went at once to stand it up, but the bees were so irritated by the jar that they stung me so badly that I vowed they might lie there and freeze. The winter was severe, but they came through in good condition, to my surprise, as I thought they were dead.

HUNTING BEE-TREES AND WILD GAME.—Bee-trees are plentiful here. One man cut 45 trees last year, and secured considerable honey from them. Game—such as squirrels, ducks and some turkeys and deer—is here. I love the sport

of hunting, and kill considerable of them myself. What has become of Mr. A. C. Aten, of Round Rock, Texas? I hope he has had a good honey crop. I trust that Mrs. Jennie Atchley has been successful with her queen-rearing, and wish to congratulate her upon her interesting department in the BEE JOURNAL.

W. S. DOUGLASS.

Lexington, Tex., Oct. 12, 1892.

Those Visiting Colonies Again.

The same state of affairs as mentioned on page 529, still exists without intermission, but the bees appear to be more active in the morning, and less active in the evening. I only opened the honey department on Sept. 20, but now I open the brood-chamber, and find no brood nor eggs in No. 25, and not much honey, and it is largely uncapped, which satisfies me that No. 25 is being silently robbed by No. 26.

Further examination proves No. 25 to be queenless, and that is the reason the bees made no resistance; but apiarists will say, "Why did no other colonies assist in the long-continued robbery?" I don't know, but I would like to know, because I never saw or heard of the like before this. Robber bees appear to communicate the welcome news to every colony in the apiary, and all get a share of the honey; but in this case they are too selfish, and, thief-like, propose to carry it all into their own home.

Both colonies are working with a vim. They have stamina and "git up and git there, Eli," qualities.

For the novelty and curiosity of the matter, I intend to keep a close watch of these funny little bees, just to see what will become of them. If they are crazy, I will so state after I become satisfied about it. J. C. BELL.

Holland, Tex., Sept. 26, 1892.

Methods of Introducing Queens.

MRS. ATCHLEY:—I received your request about my method of introducing queens.

The plan of spraying bees when introducing queens is not a new one. I use wintergreen, as it seems not to excite the bees like some other kinds of flavors. Take ½ teacup of honey, fill with water, add ½ spoonful of the essence, and after thoroughly mixing, and the old queen has been removed, spray all the combs and bees by taking a small sip of the mixture in the mouth and blowing it over them. Treat the queen and escort to a dose, and release.

When honey is scarce, and conditions are not favorable, I cage the queen 48 hours before the operation. The colonies that received the queens which I got at one time, had been queenless 15 days or more.

I will give you a novel method which I have practiced in some extreme cases, which has not been a failure yet. My two apiaries are seven miles apart. When ready to go from one to the other, and I have a colony that is stubborn about receiving a queen, I give them a good smoking, rap on the hive a few minutes, and smoke the queen in at the entrance. I then close up the hive, load on the wagon quickly, and drive to the other place, keeping them confined until after dark. I had one vicious colony of hybrids that destroyed 5 or 6 queens given them by other methods, that received the one on this plan all right. JAS. POINDEXTER.

Bloomington, Ills., Oct. 5, 1892.

"The Winter Problem in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apiary. Price, postpaid, 50 cents; or given as a premium for getting one new subscriber to the BEE JOURNAL for a year. Clubbed with the BEE JOURNAL one year for $1.30. Send to us for a copy.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 647, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Judging from Your Experience, Can Bees Hear?

Query 845.—Judging from your own experience, do you think that bees can hear? I want to settle a dispute, and so desire the opinions of the leaders.—Norma.

Yes.—R. L. TAYLOR.

No.—G. M. DOOLITTLE.

Yes.—MRS. J. N. HEATER.

Yes.—MRS. JENNIE ATCHLEY.

I think they can.—H. D. CUTTING.

I am very sure they can.—M. MAHIN.

I don't know. I think they do.—C. C. MILLER.

Most assuredly, bees do hear.—E. FRANCE.

Yes, sir. Their sense of hearing is acute.—J. P. H. BROWN.

Yes, I think they must either hear or *feel* sound.—EUGENE SECOR.

I am not sure on this point, but I think they can.—J. M. HAMBAUGH.

I am satisfied that they can, judging from observation alone. In fact, I am positive of this.—W. M. BARNUM.

Yes; the different notes made by them, such as in robbing, anger, etc., fully convinces me on that point.—C. H. DIBBERN.

Yes. They certainly can hear some sounds very plainly, even though some noises seem entirely unnoticed by them. —DADANT & SON.

I have no idea. It may be I know or believe less about it than I otherwise would, because I don't care, as it is a point not vital to getting money out of bees.—JAMES HEDDON.

I think they can hear. Some scientists say they have no organs of hearing. But from long and careful observation, I am satisfied that they are susceptible to the vibrations of sound.—MRS. L. HARRISON.

Yes. If you don't believe it, just squeeze one so as to make it squeal from being hurt, and have it near others. If they don't hurry to the rescue they are different from mine.—A. B. MASON.

I have no doubt they can hear, but I don't know of any poof that can be offered on either side of the question. I don't think a dispute on the question *can be settled.* It is wholly a question of belief.—J. E. POND.

If you have an ugly hybrid colony, just invite your disputant to hit the hive a good crack with a club. He will probably soon find out. Bees may not hear the same as we do, but they always seem to know quick enough when their hive is rudely disturbed.—G. L. TINKER.

That bees "hear" according to their nature and organism, as certainly as other animals do, there can be no rational dispute about it. That such a question as this has been admitted into the range of doubt and dispute, argues bad for the discerning powers of those who press the question.—G. W. DEMAREE.

Not as we hear, for they have no such organs. Their tactile or touch sense is very acute. Thus a slight jar or tremor arouses them at once. So delicate is this sense that a special tap on the hive irritates and alarms them more than a peal of thunder that makes the whole earth shake. The first, most concerns their welfare.—A. J. COOK.

In the ordinary meaning of the term, I do not think that bees can hear. But just as there are noises that are perceptible to some persons in other ways than by the use of their ears, so may some of the vibrations that cause sound—and perhaps some that do not, to our ears—be perceptible to the delicate organism of the bee.—JAMES A. GREEN.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 647.

Report of the Illinois State Bee-Keepers' Convention.

Written for the American Bee Journal
BY W. Z. HUTCHINSON.

(Continued from page 602.)

SECOND DAY—Forenoon Session.

Apiarian Exhibit at the World's Fair.

After the reading of Mrs. Stow's essay, Mr. H. D. Cutting asked what had been done about having an exhibit at the World's Columbian Exposition. This started the World's Fair business again.

In response to an inquiry, Mr. W. F. Clarke said that the exhibits from Canada would be both private and governmental; but the government would foot the bills in either case. The government would pay for a man to come over and put the exhibit in place. Mr. Allen Pringle is the man who is to do this work. The government will also pay freights and for the packages. The honey will be sent over in tin, and put into glass after its arrival.

Secretary Stone had just offered a resolution to the effect that unless the Illinois bee-keepers received some help from the State, they would make no exhibit, when the committee from the Agricultural Board was announced.

Appropriation for an Apiarian Exhibit at the Columbian Exposition.

The chairman of the committee said in substance that, having recognized and aided other kindred societies, the Board was inclined to be equally liberal with bee-keepers. (Cheers). They did not know what bee-keepers wanted, and wished to confer with them for that purpose. They were not sure that bees ought to be allowed in the building, but that was a matter for future consideration.

The two committees, the one from the State Board and the one from the bee-keepers, went out to confer, and the resolution offered by Secretary Stone was laid on the table, and a recess taken. Upon the return of the committees, the convention was again called to order.

The chairman of the bee-keepers' committee said that he had found the other committee favorably inclined to do something for bee-keepers, but bee-keepers must first say exactly what is wanted.

The Chairman of the Agricultural Committee said that no "lump" sum would be appropriated. Bee-keepers must first say what they want. They would rather give $1,000, if assured that a splendid exhibit would be made, than to give a less sum for a meager show. But bee-keepers must first say what the money is wanted for, so that it can be shown in what manner the money is to be used, then the matter will be taken under consideration. Money would be appropriated to be paid out upon the proper vouchers, but no "lump" sum would be given to bee-keepers to do with as they pleased.

Mr. Newman moved that the bee-keepers' committee meet the committee from the State Board the next morning at 8 o'clock, and lay before it plans that would enable them to take some definite action. Carried.

The convention then adjourned to meet at 2 p.m.

SECOND DAY—Afternoon Session.

What Money Shall be Asked For?

Mr. Newman said that money would be needed to pay for the glass cases, to pay freight, and for some one to look after the exhibit, and if there were to be competitive exhibits, there would be money needed to pay the premiums. The most important question to be settled now was, Shall there be a competitive exhibit?

S. N. Black moved that there be no competitive exhibits, and that bee-keepers be asked to contribute honey and wax to make an exhibit; the understanding being that all goods so furnished shall be returned free of cost.

Frank Benton advised a contributed exhibition instead of a competitive one.

W. Z. Hutchinson and J. A. Green took the same ground. They thought that a competitive exhibit would bring out too many duplicates. Upon motion, a committee composed of Wm. F. Clarke, Thomas G. Newman and S. N. Black was appointed to decide upon what should be asked of the State Board of Agriculture. The committee was in-

structed to ask for $1,000, all disbursements to be made upon proper vouchers.

At this time Messrs. W. F. Clarke and Frank Benton were made honorary members.

Rearing Queen-Cells.

J. A. Green had used the Doolittle method of rearing queen-cells, and secured most excellent queens. He had tried the Alley plan, and did not get quite so nice queens.

Marking of the Carniolans.

Frank Benton said that in Carniola the pure Carniolans were a dark, steel-gray color with a white or whitish ring at the lower edge of each segment. The bees are rather larger than the blacks or Italians. The queens are of a dark, copper color. There may be other markings, but they are exceptional. The dark Carniolans are more gentle than those having a dash of yellow blood in their veins. Irascibility is a sign of impurity. He did not think them any better workers than the Italians, but they were more prolific. He preferred Carniolans in their purity, but if compelled to choose a cross, he would have Carniolan blood as one of the factors. He preferred it to Italian blood.

At this stage of the proceedings, Thomas G. Newman, George W. York, President Hambaugh and Secretary Stone were appointed a committee to present to the committee from the State Board the resolutions that the committee had prepared in regard to what was wanted in the way of an appropriation to enable the society to make an apiarian exhibit at the Columbian Exposition. This committee was given full power to act.

This really ended the World's Fair business, and what little time remained was devoted to the discussion of some of the queries that had accumulated. The first one asked was,

What is the Average Weight of an Average Colony on Nov. 1 ?

W. Z. Hutchinson thought it about 4 pounds. J. H. Larrabee had been weighing some average colonies in eight-frame Langstroth hives, and some of them weighed as much as 8 pounds. He placed the weight at 6 pounds. J. A. Green said 3 pounds. Mr. Hambaugh said 4. Mr. Benton said 8. Secretary Stone had once wintered 2 colonies in the cellar when each colony weighed only 5 pounds, as the weight of bees, honey and combs.

Large Colonies—Are they Desirable ?

J. H. Larrabee had tried wintering extra-large colonies, and they did not seem to do so well.

President Hambaugh preferred large colonies wintered out-of-doors, with substantial protection.

W. F. Clarke said that strong colonies were much more able to successfully combat foul brood.

J. A. Green said that a good honey-flow often helped to cure foul brood. Sometimes it seemed as though it was a cure of itself.

Bee-Keepers Recognized by the Government.

Mr. Thomas G. Newman called attention to the fact that the Government had sent Mr. Frank Benton to this meeting of bee-keepers. The Government had thus recognized bee-keepers, and he offered the following resolutions, which were adopted unanimously :

WHEREAS, The United States Department of Agriculture at Washington, D. C., having shown in a measure its recognition of our industry by instituting certain experimental work in apiculture. under the Division of Entomology, and also by sending the Apiarist of the Department, Mr. Frank Benton, as a delegate to this convention; and

WHEREAS, Desiring to express our great appreciation of this recognition of the industry which we represent, and of the courtesy which has thus been shown to us, be it therefore

Resolved, That our thanks are hereby tendered to Secretary Rusk, Assistant Secretary Willits, and to Dr. Riley, Chief of the Division of Entomology, for their action in the matter ; and

Resolved, That we formally and earnestly request a continued representation of apiculture at the Department ; and

Resolved, That our thanks be tendered Mr. Frank Benton for his assistance and interest in our proceedings ; and

Resolved, That the Secretary of the Illinois State Bee-Keepers' Association transmit copies of these resolutions to Secretary Rusk, Assistant Secretary Willits, and to Dr. Riley.

Mr. Benton said that he had been asked to write an essay on "Modern Bee-Keeping in Europe." He had rubbed the propolis off his hands, but as he started in, the old memories came

crowding in, and he found his eyes dim with tears. He threw away the paper, and decided that his talk should be informal. He gave many interesting accounts of bee-keeping in Europe, all of which showed that the bee-keeping across the waters was far behind the times as compared with that of this country.

On motion of Mr. Newman, it was voted to pay W. Z. Hutchinson $20 for his services as reporter.

The committee appointed to meet the committee from the State Agricultural Board, reported as follows:

Your committee appointed to meet the committee from the State Board of Agriculture, would report that they favor an appropriation of at least $1,000 for the purpose of making a creditable display of apiarian products and implements.

They also desire this Association to formulate plans for an exhibition, and to state for what purposes the money is required before the appropriation is made. THOMAS G. NEWMAN, J. H. LARRABEE, J. A. GREEN, } *Com.*

A report of the committee on Apicultural Experiments was made as follows:

Your committee on Apicultural Experiments would submit the following:

WHEREAS, By the Hatch Act, which establishes and equips an Experiment Station in every State and Territory, and appropriates $15,000 annually to each Station, to be used exclusively to further research and experiments in the industrial pursuits; and

WHEREAS, The pursuit of bee-keeping offers a grand field for such research and experiments; for upon the work of the bees and other insects depends the cross-fertilization of the flowers and the consequent production of fruits and vegetables in the greatest abundance, and of the most perfect kind; and

WHEREAS, Quite often foul brood and other diseases have decimated the bees in certain localities, and a short crop of fruits and vegetables have been the result, because the pollen masses were not carried from flower to flower by these "marriage priests" to fertilize them; and

WHEREAS, It is the appropriate work of the Experiment Station to make thorough and minute examinations of such microbes as attack the bees, and leave disease and death in their trails, and to give information which will aid bee-keepers to prevent or cure such diseases; and

WHEREAS, Those in charge of the Experiment Stations cannot be expected to know what is transpiring in the different apiaries of the State of Illinois, only as such things are brought to their notice by apiarists. It is therefore advisable to have a good bee-keeper appointed, at a moderate salary, to keep a sharp look-out for such matters, and present them to the proper authorities at the Experiment Station, as well as the Illinois University—so as to be able to take advantage of the wisdom of the professors in these institutions, and also to serve the interests of the pursuit of bee-keeping; therefore, be it

Resolved, By the Illinois State Bee-Keepers' Association in convention assembled at Chicago this 19th day of October, 1892, that we commend the foregoing facts to the consideration of those having the United States appropriation of $15,000 in charge, in the State of Illinois, and ask that they appoint ————————, a bee-keeper of ability and experience, acceptable to this association, to studiously watch for, and present to them such matters as should receive the attention of the Director of the Experiment Station and the professors of the University of Illinois. THOS. G. NEWMAN, MRS. L. HARRISON, GEO. POINDEXTER, } *Com.*

The foregoing was passed unanimously, and Mr. J. A. Green selected to represent the interests of Illinois bee-keepers.

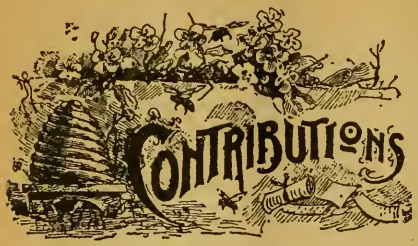
Mr. Larrabee presented the following resolution, which was unanimously adopted:

Resolved, That we, the Illinois Bee-Keepers' Association, do thank the Managers of the Commercial Hotel for the courteous treatment received, and many favors extended to us during this meeting.

The convention then adjourned to meet in Springfield, Ills., at the call of the Executive Board.

W. Z. HUTCHINSON, *Reporter.*

Your Subscription to the BEE JOURNAL—is it paid up to date? If not, please send to us a dollar for a year, and thus show your appreciation of our efforts in your behalf. Look at your wrapper-label, and if the date looks like this—"Dec91," that $1.00 sent to this office will make it look like this—Dec92.



Uniting Colonies, Food for Bees in Winter, Etc.

Written for the American Bee Journal

BY G. M. DOOLITTLE.

A correspondent wishes to know through the columns of the AMERICAN BEE JOURNAL "How it would do to unite two weak colonies of bees for winter." This is the proper thing to do, for two weak colonies, kept separate, will consume nearly twice the stores which both would united, and very likely perish before spring; while, if put together, they would winter as well as any large colony. The way to proceed is as follows:

If one of the queens is known to be feeble or inferior, hunt her out and kill her, so that the best queen may survive, otherwise pay no attention to the queens, for one of them will soon be killed after uniting.

Having the queen matter disposed of, go to the colonies you wish to unite, and blow smoke quite freely in at the entrance, pounding on top of the hive at the same time with the fist. When both have been treated in this way, wait a moment or two for the bees to fill themselves with honey, when one is to be carried to where the other stands, and both hives opened.

Now select out the combs from both hives which contain the most honey, placing them in one hive. In thus placing in, it is always best to alternate the frames, whereby the bees are so mixed up that they have no desire to fight, as each bee touched by another is a stranger, while their being filled with honey has a tendency to make them peaceable.

After the hive is filled, arrange the quilt or honey-board, and put on the cover. Next put a wide board in front of the hive, leading up to the entrance, and proceed to shake the bees off the remaining frames, taking first a frame from one hive and then from the other, thus mixing the bees as before.

After all are in, set a board up against the front of the hive, sloping over the entrance, so that the next time the bees fly, they will bump against it, thus causing them to mark their location anew, so that they will not return to their old place and get lost.

The causing of the bees to fill themselves with honey, and the general mixing up, has a tendency to cause them to mark their location anew, but it is well to use the board in addition to this, and also remove all relics of the old hive, so there is no home-like look about their old location to entice them back. Put the remaining combs away in some safe place for the next season's use, and the work is done.

SUGAR FOOD FOR BEES IN WINTER.

The same correspondent wishes to know "How to feed bees on sugar so they will not stick fast." There are two ways of feeding bees on sugar, one of which is to make the sugar into large cakes of candy, weighing from 5 to 15 pounds, which are laid over the frames during winter for their winter stores.

During winter the moisture arising grom the bees collects on the candy, which moistens it to such an extent that the bees can lick it up, thus giving them a supply of food. However, during a cold spell, it often happens that the bees fail to cluster on the candy, and the severe cold keeps them from leaving the cluster to reach it, so that starvation occurs, which is not satisfactory to the apiarist; hence this plan of feeding is not practiced, only as the bees have been neglected until cold weather prevents any other mode of feeding. When a colony has a few pounds of honey in the hive to bridge over these cold spells, this way of feeding is very satisfactory.

The second plan, and the preferable one, is to make the sugar into a syrup, which is fed to the bees in feeders during the warm days of October and early November, so that they can store it in their combs, and cap it over the same as honey. Many think such stores better for the bees than honey, but if plenty of honey is in the hives, I should never extract it for the sake of feedlng sugar.

To make the syrup, I find the following formula the best, after trying nearly all the different ways recommended, and although I have given it before, I think I will be excused for giving it again, especially when it is known that several

have asked for it during the past few days. Here is the way I make it:

Put 15 pounds of water in a vessel that will hold about 24 quarts, and bring it to a boil. When boiling, slowly pour in 30 pounds of granulated sugar, stirring as it is poured in, so that it will mostly dissolve instead of settling to the bottom and burning. Now bring to a boil again, and skim, if impurities arise, when it is to be set from the fire, and 5 pounds of honey stirred in. This gives 50 pounds of food of about the consistency of honey, and as soon as it is cooled, so that it is a little warmer than blood heat, it is ready for use. The honey is put in to prevent crystalization, and with me it proves far superior to vinegar or cream-of-tartar.

The reason why the correspondent's bees stick fast, is because a float was not provided to keep the bees out of the syrup. Unless such is provided, hundreds of the bees will be drowned.

MILK-PAN BEE-FEEDERS.

For winter stores, when fed in the fall, I would as soon have a common milk-pan to do the feeding with, as anything. Set this on top of the hive, and fill it with syrup, after which pull up two or three handfuls of grass and scatter over the syrup for a float, or use shavings or corn cobs, as is preferred. The trouble with the latter is, that they soak up much of the syrup, while the former do not.

Set up a small piece of board, a chip, or a piece of honey section against the side of the pan, so the bees can easily climb over to the food, when a hole is to be opened to the hive below, by turning up one corner of the quilt, or removing a slat in the honey-board for the bees to come up through. Now scatter a few drops of the food down through the hole, and over the chip, and put on the cover, seeing that the joints are all tight so that no robber bees can get in.

Borodino, N. Y.

The Season, Honey-Vinegar, Marketing, Etc.

Written for the American Bee Journal

BY F. H. RICHARDSON.

The honey season is over. The outlook which was so bright for a fall crop ended in a dismal failure, or at least comparatively so. It was so dry and hot that the Spanish-needle, after blooming profusely for two weeks and yielding some nectar, dried up and "fizzled." I secured 200 pounds of extracted surplus, and 55 pounds of comb honey, where I should have had half a ton at least. However, the bees have plenty of good winter stores.

I am thinking of extracting the brood-combs and giving them combs free from bee-bread, and feed sugar syrup, as I am afraid the pollen contained in the honey and comb will be injurious for winter food. The extracted honey I can get 10 cents per pound for. What do you think of this?

POLLYWOGS IN HONEY-VINEGAR.

During the summer I made a barrel of honey-vinegar, and yesterday, upon examining it, I found it good vinegar, but full of very small semi-transparent "pollywogs" (I don't know what else to call them, as they exactly resemble the pollywog in shape). I should like to know what these are, and how to get rid of them, for, as it is, a barrel of good vinegar is a loss.

HARDLY KNEW MY FRIEND.

By the way, I hardly knew my friend, the AMERICAN BEE JOURNAL, when it came week before last. Its "new dress" is very becoming, and its arrangement I like better. May its shadow never grow less.

BEGINNERS AND THE MARKET.

On page 496 I notice an article from W. C. Frazier, on "Beginners and the Honey Market." Well, I for one, certainly have not "ruined this market," as I got 5 cents per pound for my comb and 1 to 2½ cents *more* for extracted honey than my father did.

It may be that beginners do ruin the market, but I am of the opinion that the small local markets are ruined by farmers and others who only keep a few bees, and bring their honey to market in any and every shape, and take any price the storekeepers see fit to give. There are a half dozen men within two miles of me who have from 15 to 45 colonies of bees, and with one exception I find them all densely ignorant in one of the most important branches of apiculture, namely, preparing for market and selling to advantage. Not one (with the exception I mentioned) takes a bee-paper, or has standard hives. Some of them have had bees for years, though they do not follow it as a business. When they happen to get any surplus, they bring it in buckets, jars, washtubs, or anything

else—a nasty, sticky-looking mess—and take whatever they can get for it. I shall endeavor to educate them some.

Moberly, Mo., Oct. 16, 1892.

[In regard to extracting the honey and feeding sugar syrup for winter stores, we would refer you to Mr. Doolittle's article on page 634 of this issue of the BEE JOURNAL.

As Messrs. Chas. Dadant & Son are extensive manufacturers of honey-vinegar, will they kindly reply to Mr. Richardson's query as to the "pollywogling" appearance of his honey-vinegar?

One way to prevent beginners ruining a honey market, is to put into their hands the best literature on the subject of honey production. That would help them to educate themselves.—ED.]

Experience with Cork as a Winter Packing for Bees.

Written for the American Bee Journal

BY THOS. THURLOW.

On page 527 the editor asks for experience in regard to cork as a winter packing for bees. I have used it for years. Granulated cork is one of the best non-conductors of heat, used to any amount. It is used for bee-houses, refrigerators, steam-pipe covering, etc. Most substances used for winter bee-covering, such as leaves, sawdust, chaff, straw, etc. (all of which I have used), are practically solids in themselves, and depend upon the air-spaces between the particles for their non-conductibility; but cork is very porous in itself, as its lightness verifies, and has that advantage over almost any other non-conductor.

Then, again, if leaves, chaff, or such trash is used, it must be thrown out in the spring, and new material obtained again in the fall—at least that is my experience, but cork lasts. I have used the same cushions over the bees for five or six years. When I take them off in the spring, they are dried out in the sunshine and wind, and put away for fall. My cushions are burlap bags that will hold enough cork *loosely* to fill an eight-frame Langstroth hive about 4 inches deep. A few sticks about ½ or ¾ inch square are put across the frames over the bees, the surplus story put on, the cork bag put in, and the cork worked out level, with the fingers, to fill the corners and edges snugly. The cover is then put on with a nail in under it to let out the moisture that comes up through the cork, from the heat of the bees, and a 10-pound weight is put on top of all; the winter may then come.

I am not in favor of outside packing. I have tried it many times, and believe that the drying out and warming up, that an inch-board hive gets from a bright winter sun, is better for the bees than all the packing outside of the simple hive.

There are cork factories in nearly all the large cities.

Lancaster, Pa.

Swarm of Bees in September—Five-Banded Bees.

Written for the American Bee Journal

BY JOHN D. A. FISHER.

Several weeks ago, while my wife and I were going to Salisbury, N. C., she looked up into my face, saying, "I forgot to tell you that one of our colonies of bees swarmed to-day, but the swarm went back into the hive."

"They did?" said I, thinking to myself there is something wrong—a queen lost, or out of honey.

We arrived at home too late that night to look after the matter, and see what was wrong. So the next morning I called my daughter, and asked her to go with me and show me the hive that the bees had swarmed out of. She pointed out one of my best colonies, saying, "That is the one."

"Oh, no," said I, "You are certainly mistaken."

"Yes, but they did, pa. They were all over the hive."

"That makes no difference, daughter, those bees are all O. K."

Just about this time I looked out some little distance, and sure enough, there, hanging on a peach-tree, was the swarm of bees.

I at once began a search to find where the bees came from. Very soon I came to a hive that had no bees in it except a few young ones, and no honey, either. I at once made a lot of nice sugar syrup, and poured it into combs. I then took the hive, combs and all, to where the swarm was, held the hive up against the bees, and, O my! how glad they were to go back into their old home, with a good supply of sweets on hand.

These bees took fresh courage, and to-day it would do you good to see them rolling in honey, gathered from aster bloom. A little help at the right time, and these bees would not have left their home. But do not let your bees come to nothing after they have become discouraged and left their home in despair. Just fill up the combs with nice, thick sugar syrup, and put them back in their home, and see how glad they will be, and how good you will feel that you have helped your little pets out of trouble.

THOSE FIVE-BANDED BEES.

I am so glad that Mrs. Jennie Atchley has explained the matter in regard to the five-banded bees. I had bought a fine queen, and she was to produce five-banded bees. Well, she did do that very thing—some beauties, I tell you; but she also produced some bees with four bands, and a few with only three yellow bands; so I was beginning to feel a little disappointed, and reading what others had to say about this same matter, I began to wonder if there was not something wrong about those five-banded queen-bee breeders. Mrs. Atchley has cleared the matter all up in the AMERICAN BEE JOURNAL, and I am now perfectly satisfied as regards the five-banded bees.

That is the way, my friends; give us the truth, and nothing but the truth. A simple advertisement with the silver lining of pure truth, a satisfied customer, a clear conscience, will be worth a thousand times more to us than any advertisement shrouded in gold, shining out something that is not truth, or not the whole truth, dissatisfied customers, and with a conscience telling us that we are not doing unto others as we would like them to do unto us.

THE BEE JOURNAL'S NEW DRESS.

When the "Old Reliable" came to my desk last Friday evening, I hardly knew it. Just look at it! What "get up and get" is there! What taste and talent combined! Thank you, Bro. York, for the new design and "get up." It gives the whole thing new life. I would like to give you one good, hearty hand-shaking.

Woodside, N. C., Oct. 10, 1892.

[Thank you, Bro. Fisher, for your hearty words of approval, and admiration for our new front-page design. Nearly every letter brings us new compliments upon the improved appearance of the old AMERICAN BEE JOURNAL. Now, if all who are able, will help to keep its pages *illustrated* with new and original ideas each week, we may all take much pride both in the appearance and in the contents of the "only weekly bee-paper in America," the "old reliable" AMERICAN BEE JOURNAL.—ED]

Differing Opinions, Mating of Queens, Etc.

Written for the American Bee Journal

PROF. C. L. STRICKLAND.

For us bee-keepers to differ in opinions is not strange, for our ways are different, also the ways of the same bees are different in different States and locations. A course in the apiary pursued by Mr. A. in Maine, would very likely fail in this State (Kansas), therefore, bee-keepers of different locations must at last establish ways of their own invention to manage their bees, to correspond with the honey-flowers and other resources, as they may appear.

DRONES AND QUEENS MATING.

Although drones are of vast importance, it does not all depend upon them for improvement. The queen mates but once, and by close observation it can be seen that the organ of the drone is so wonderfully constructed that partial escapement of the organ cannot take place, but rather, the escapement is in full, and the insect dies instantly. When this is the case, the royal receptacle receives the whole, and by main force the queen tears herself away from her dead paramour, and returns home with some part of the mating still visible, which, in the course of a few hours, is absorbed.

This one transaction serves for a lifetime, so if the queen mismates, her progeny are hybrids. For example, take a pure Italian queen, mate her to a black drone, and some of her bees will be two-banded, some one-banded, and some none. Take the same pure queen mated to a pure drone of the same strain, and her bees will be three-banded. Take a pure Carniolan queen, mate her with a pure Italian drone, and her bees will be some two-banded, some one, some none (that is, yellow).

If the drones, to which yellow queens mate, have not any blood of yellow strains in them, the tendencies are to

blackness. For example, take an Italian queen mated to a black drone, then take an egg of her progeny that will produce a dark bee. Now rear a queen from this egg, and mate again with a dark drone, and her bees will show a dim yellow band on some, on others none; three-fourths will be dark. Try this same process again, and where are your Italian signs? Now, just reverse this plan, and the black blood will disappear.

It is different with the bee than with other animals. The bee is not so influenced by external impressions, while other stock is. The higher the degree of perfection, the greater the external influence on the embryo offspring. By very close observation, of sufficient time, you can tell with what kind of a drone your queen mated, by the markings of her bees.

Peabody, Kans.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Nov. 17-19.—Missouri State, at Independence. W. S. Dorn Blaser, Sec., Higginsville, Mo.

Nov. 28.—Allegany Co., at Angelica, N. Y. H. L. Dwight, Sec., Friendship, N. Y.

Dec. 1.—Carolina, at Charlotte, N. C. A. L. Beach, Sec., Steel Creek, N. C.

Dec. 14, 15.—Eastern Iowa, at Maquoketa. Frank Coverdale, Sec., Welton, Iowa.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel, Wis. Edwin Pike, Pres., Boscobel, Wis.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

When Renewing your subscription to the BEE JOURNAL, please send the names of those around you who have bees, and we will send them free sample copies. Then afterward you can get them as new subscribers, for which work we offer some excellent premiums in each number of the JOURNAL. While thus helping yourselves, you will also be helping others. Why not begin now?

The Golden-Rod Torches.

Spring is the morning of the year,
And summer is the noontide bright;
The autumn is the evening clear
That comes before the winter's night.

And in the evening everywhere
Along the roadsides, up and down,
I see the golden torches flare
Like lighted street-lamps in the town.

I think the butterfly and bee,
From distant meadows coming back,
Are quite contented when they see
These lamps along the homeward track.

But those who stay too late get lost;
For when the darkness falls about,
Down every lighted street the Frost
Will go and put the torches out!

—Independent.

Fall and Winter Feeding.—Many of our new readers will soon be inquiring as to the best methods of feeding bees in the fall and winter, hence we take the following from the October *Review*, written by Mr. M. E. Hastings, of New York:

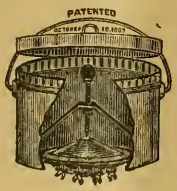
I belief that the best method of feeding for winter is to give frames of honey, but in running for comb honey there are not many colonies that have frames of honey to spare after the season is over. It is necessary every fall for me to feed, as there are not enough fall flowers in this locality for bees to gather sufficient honey for winter.

I used to run several colonies entirely for honey in the frames to give to those that were short, but abandoned the idea some years since, for the reason that the amount realized for the comb honey from those same colonies, should they be put on frames, would leave a good balance to the credit in the difference in

the price of comb honey and the sugar syrup fed back in the fall.

The question now at issue is What style of feeder and feeding is best to use for the desired result, that of having strong colonies ready to harvest the honey crop? The one that I have used for six or seven years is the "Perfection Feeder." For an all-purpose feeder it cannot be excelled. It can be used the year round, winter and summer. My bees were fed in December, 1891, and wintered O. K. Out of 45 colonies the loss was only three. With any other feeder it could not very well have been done at that time, as the thermometer several times reached zero and below it.

It can be used in zero weather or lower, in-doors or out-of-doors, as the syrup is directly over the cluster, and the bees do not leave the hive to get it. The heat rising from the cluster against the cloth on the bottom of the feeder allows the honey to flow freely. If I want to feed up quickly, I put on two or three feeders at a time, and regulate the flow as fast as they can take it. It can be refilled without disturbing the bees, or removing the feeder.



The Perfection Bee-Feeder.

For spring feeding it is just the thing, and can be used as before stated during cool weather, there being no possible danger from robbers, as the honey is directly over the cluster, and there is no scent outside of the hive to guide them.

For stimulating brood rearing it is perfection itself, as the flow can be regulated to any desired amount just enough to keep the queen laying until the principal harvest is ready. I have practiced stimulating for some years, and it has paid me well.

The Habit of Observation.—This is a habit that will pay to carefully cultivate. Hon. Eugene Secor, of Forest City, Iowa, writes thus upon this subject in a recent number of *Gleanings*:

Isn't it strange that so many people go through this world without observing the little things about them? Farmers, especially, fail to notice many interesting things in nature with which they constantly come in contact. I have talked with many farmers about the fertilization of flowers by bees or bumble-bees, and I do not now remember one who had any idea that they were indebted to the honey-gathering insects for the complete fertilization of the clovers. Although constantly in the fields, and, may be, aware that bumble-bees visit their red clover, they had not given them any credit for the work done in insuring a crop of seed. The nests, perhaps, are destroyed on sight. I venture the assertion, that nine out of ten farmers, fail to give bees any credit for their valuable aid to agriculture. They have been reared in the midst of the most wonderful exhibitions of divine wisdom and beneficence with the faculty of observation as blind as a bat.

There is one argument in favor of bee-keeping that ought not to be lost sight of—it trains the mind to observe. If he would make a success, the bee-keeper must train this faculty. If education consists in storing the mind with facts, and if observation leads one to investigate, prove and apply, it is as good as a school so far as it goes. This is probably the reason that a successful bee-keeper is above the average in intelligence. He has learned to observe, and hence is continually gathering new facts and adding to his store of knowledge.

If a person does not know the average season for white clover and linden to bloom, he is not likely to know when to put on supers, or to be on the lookout for swarms; and if he does not know the source from whence comes this honey, he is likely to put on supers until frost comes. It sounds odd enough to charge bee-keepers with such a lack of bee-lore; but I know of persons who are as ignorant of essentials as that. It is not necessary to add that such persons never study books or papers on the subject, and that they never succeed.

But study all we may, and read all we may, we need to cultivate the faculty of observation. There are always some problems in apiculture which cannot be solved by a general rule. Each one must work it out for himself amidst his own environments.

There is Not One Person but what can secure at least *one* new subscriber to the BEE JOURNAL, and get the splendid Premium offered on page 647. Try it.

AMERICAN BEE JOURNAL

ESTABLISHED IN 1861 — OLDEST BEE PAPER IN AMERICA

PUBLISHED WEEKLY BY

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At One Dollar a Year,

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Never Send Silver in letters. It will wear holes in the envelope, or may be stolen.

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Postage Stamps of any denomination may be sent for any fraction of a dollar; or where Money Orders cannot be obtained, stamps for any amount may be sent.

Subscription Credits.—The receipt for money sent us will be given on the address-label of every paper. The subscription is paid to the END OF THE MONTH indicated.

Do not Write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Emerson Binders, made especially for the AMERICAN BEE JOURNAL, are convenient for preserving each weekly Number, as fast as received. They will be sent, post-paid, for 50 cts. each. They cannot be sent by mail to Canada.

Lost Numbers.—We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails, we will replace them if notified before all the edition is exhausted.

Always State the Post-Office to which your paper is addressed, when writing to us.

Special Notices.

The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription to the *end* of next December:

Wallace Porter Dec92
Suffield, Portage co, Ohio

Convention Notices.

IOWA.—The Eastern Iowa Bee-Keepers' Association will meet at Maquoketa, Iowa, in the City Hall, on Dec. 14th and 15th, 1892. All are invited. FRANK COVERDALE, Sec.
Welton, Iowa.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m. on Monday, Nov. 28, 1892. All bee-keepers are invited to attend.
Friendship, N. Y. H. L. DWIGHT, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers' Association will hold its third annual session at the Court House in Charlotte, N. C., on Dec. 1, 1892. A full attendance is especially desired, and all those interested in bee-culture will have a hearty welcome.
Steel Creek, N. C. A. L. BEACH, Sec.

MISSOURI.—The 7th semi-annual convention of the Missouri State Bee-Keepers' Association, will be held at the Court House in Independence, Mo., on November 17, 18, and 19, 1892. An Interesting and well-arranged programme has been prepared, and we extend a cordial invitation to all bee-keepers to meet with us in this very important convention.
W. S. DORN BLASER, Sec.
Higginsville, Mo.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

THE NORTH AMERICAN Bee-Keepers' Association will hold its annual Convention in Washington, D. C., near the end of this year. The exact date cannot yet be given. Mr. Frank Benton is keeping close watch, and others are watching for him, to learn when some other Society will meet in Washington, so that the North American may meet in conjunction with it and thus secure reduced railroad rates. The Secretary is at work arranging a programme, and as soon as the exact date for holding the Convention can be given, the announcement will be made.
Flint, Mich. W. Z. HUTCHINSON, Sec.

Fifty-Two numbers of the BEE JOURNAL for $1.00! Where can you find a cheaper, yet more valuable, volume of over 1,600 pages of bee-literature for that amount of money? You can't *afford* to do without it if you care anything for bees. It is worth two cents a week just to get a look at its "cheering face."

Be Sure to read offer on page 611.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, November 5th, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c., according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Good demand for fancy white comb, 18@19c.; No. 2, 15@16c.; No. 3, 13@14c. Buckwheat, 12@13c. Fancy white extracted, 9c.; amber, 7½@8c.: dark, 7c.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand good for all kinds of extracted honey at 5½@8c., according to quality. Arrivals not equal to demand. We dare not solicit new trade. Comb honey is scarce, at 15@16c. for best white.
Beeswax—Demand fair, at 20@25c. for go to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS. — Supply is very light. We are selling best White 1-lbs. at 18@19c. Extracted, 7@9c. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—Comb is arriving freely, and demand is good. Fancy white 1-lbs. 15@17c.; 2-lbs. 13@14c. Fair white 1-lbs., 13@14c.; 2-lbs. 12c. Buchwheat 1-lbs. 11@12 2-lbs. 10c. Extracted—clover, basswood, and orange bloom, 7½@8c. Southern, 65@75c. a gallon. Beeswax—26@27c. H. B. & S.

ALBANY, N. Y.—Honey more plenty and market some lower on all grades except white comb, which sells at 15@17c.; mixed, 13@14c dark, 10@11c. Extracted, white, 7½@8½c.; amber, 7@7½c.; dark, 6½@7c.
Beeswax, 27@28c. H. R. W.

NEW YORK, N. Y.—Demand is moderate, and supply reduced, with no more glassed 1-lb nor paper cartons, 1-lb. We quote: Comb, 1-lb, 14@15c. Extracted—Basswood, 7¼@7½c; buckwheat, 5¼@6¼; Mangrove, 68@75c per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c. F. G. S. & C.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT, 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Your Neighbor Bee-Keeper—have you asked *him* or *her* to subscribe for the BEE JOURNAL? Only $1.00 will pay for it regularly to *new* subscribers from now to Jan. 1, 1894! And, besides, *you* can have Doolittle's book on "Queen-Rearing" as a premium, for sending us one new subscriber. Don't neglect your neighbor!

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED — Second-hand Printing Press, size 8x12, or near this size. Describe it and give price. J. F. MICHAEL,
20A1t German, Darke Co., Ohio.

WANTED.—We want a printing press, and will trade Dov. hives for same. Let us hear from you. LEVERING BROS.,
18Atf Wiota, Cass Co., Iowa.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg. Arkansas

FOR SALE OR EXCHANGE.—100 colonies of Italian Bees in 7 and 8 frame Langstroth Hives. They have lots of honey for winter, and are in fine condition.
Address, J. A. KELLER,
20A2t Hammond, Lake Co., Ind.

Advertisements.

NICE, UNTESTED

ITALIAN QUEENS,

FROM now till December 15th, $1.00 each. I can mail Queens anywhere in the United States till Christmas, if purchasers will meet them at the post-office and take care of them. Safe arrival and satisfaction guranteed. Money Order office, Greenville, Tex.

MRS. JENNIE ATCHLEY,
10Atf FLOYD, Hunt Co., TEXAS.

HONEY KEGS.

These Kegs are made for Extracted Honey, need no waxing, but should be well scalded with boiling water before using—not soaked.

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Wooden Bungs, 1 cent each.

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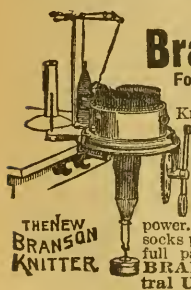

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Read what J. I. PARENT, of CHARLTON, N. Y., says—"We cut with one of your Combined Machines, last winter 50 chaff hives with 7-in. cap, 100 honey-racks, 500 broad frames, 2,000 honey-boxes and a great deal of other work. This winter we have double the amount of beehives, etc., to make and we expect to do it with this Saw. It will do all you say it will." Catalogue and Price-List Free. Address, W. F. & JOHN BARNES,
45Ctf No. 995 Ruby St., Rockford, Ill.

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WATERTOWN, WIS., Jan. 1, 1892. 1Ctf

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ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., NOVEMBER 17, 1892. NO. 21.

Thy Task may well seem over-hard
Who scatterest in a thankless soil
Thy life as seed, with no reward
Save that which duty gives to toil.

Yet do thy work ; it shall succeed
In thine or in another's day ;
And if denied the victor's meed,
Thou shalt not lack the toiler's pay.
—Whittier.

Mr. J. M. Jenkins, Wetumpka, Ala., mentioned on page 593, was married on Oct. 30, 1892, at Little Rock, Ark., to Mrs. Carrie Bulger, formerly of Wetumpka. The BEE JOURNAL repeats its congratulations, and wishes them a happy life, sweetened with the "honey" from hearts bedewed with the "nectar of love."

Mr. R. F. Holtermann, one of our Canadian friends, has assumed the management of the apiarian department of the *Canadian Live Stock and Farm Journal.* Friend H. will make it interesting for the readers of that paper, on account of his ability as a practical bee-keeper and ready writer. His name and writings are well known to our readers.

Honey Adulteration is pretty thoroughly discussed on page 663, by Prof. Cook. Read all of it. Next week Thomas G. Newman will have an article in the BEE JOURNAL upon this same subject. In that article Mr. Newman expresses so clearly and forcibly our own views upon the matter, that we think it unnecessary to repeat here, but simply call your attention to both what Prof Cook says this week, and what Mr. Newman will say next week. We may have something to say then. After reading the two articles, we want to hear what the readers of the BEE JOURNAL have to say about the subject, and also "what you are going to do about it."

The North American.—It has been suggested that we ask the readers of the BEE JOURNAL what they think of holding the next meeting of the North American Bee-Keepers' Association in Washington *during the holidays* when reduced rates may be secured. Please drop us a postal card *now*, and let us know your opinion of it. We will publish the replies as received. Let all who are likely to attend, express themselves on the matter of holding the meeting during the holidays.

For Chapped Hands or face, try oat-meal gruel to which a little honey has been added.

"Bees and Honey"—page 653.

Don't Stop It.—That's what a good many of our readers say, when renewing their subscription to the BEE JOURNAL. Mr. W. R. Elwood, of Humphrey, Mo., writes:

Please do not stop it. I could not get along without my old friend. I think its pages brighten each succeeding year.

It is encouraging and delightful to get such orders to obey. Though poor seasons may come, many are not discouraged, but hope for the "good time coming." Until then, we are sure all of the bee-papers will appreciate a steady support, so that they may be enabled to keep up the literary part of the pursuit, though the actual financial portion which is perhaps of more interest to the producer, may not for a time yield its hoped-for returns.

The Michigan State Convention notice was sent as follows by Secretary Hilton, from Lansing, Mich.:

FRIEND YORK:—I am here to arrange for the meeting of our State Bee-Keepers' Association, which adjourned to meet at this place during Christmas week, but I find we cannot meet in the Capitol building then, as they want that time to prepare the building for the Legislature. I have talked with Prof. Cook and others in regard to the matter, and we have decided to hold the meeting Dec. 13th and 14th. This is the first two days of the State Grange meeting, and we can take advantage of their reduced railroad rates, and we feel it will be better than Christmas week. Will other bee-papers please copy this notice? GEO. E. HILTON, *Sec.*

Starting an Apiary.—In reply to the question, "How extensive an apiary can be started on $100?" the editor of the *Canadian Bee Journal* says: "With that capital we would not advise commencing with more than 10 or 15 colonies; as otherwise, after purchasing the bees, there would be other sundry expenses."

Read our great offers on page 653.

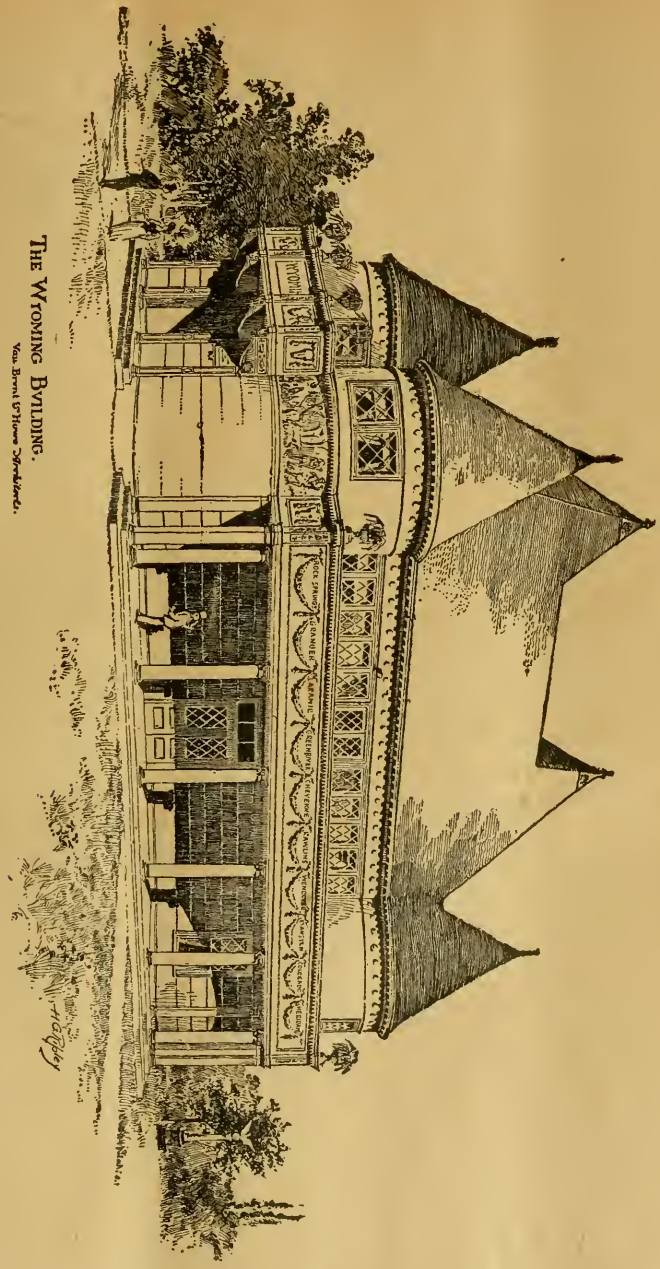
Shipping Honey to Market is a very important matter indeed, and should receive most earnest attention on the part of every producer. If not well sold, much of the labor invested in securing a crop of fine honey is almost worse than wasted. One of our apiarian exchanges contained the following excellent advice upon this subject, which should be read by all who expect to ship honey at any time to a distant market:

Some bee-keepers have lost heavily by shipping their entire crop to a commission house about which they know nothing. A person who has a carload of honey would do well to go along with it, and see to its loading and unloading. Never ship honey to a commission firm unless you examine Bradstreet's and Dun's commercial agencies. It would be well to first ship an honest sample of the product to a commission firm, and get their opinion as to what it will bring; then not to put all your eggs in one basket, but forward only part of the crop, and if the returns prove to be satisfactory, then venture more. This shipping honey to unknown parties, and have weeks lengthen into months, and months into years before returns are obtained, is very aggravating, to say the least.

British Bee-Keepers have decided to make an apiarian exhibit at the World's Fair next year. English bee-keepers know how to get up an exhibit of this kind, in fact *Gleanings* says that they are "far ahead of us in honey exhibits." If such is the case, we may look for some fine honey shows in 1893. Canada expects to "out-do the world" in this line at the same time, and we know they are "no slouch" when it comes to a honey exhibit. Bee-keepers of the United States will have a splendid chance to illustrate their ability in this line.

The *British Bee Journal* for Sept. 29th, makes the following reference to what their plans are, for securing the desired exhibit:

The interesting discussion which took place at the monthly meeting of the British Kee-Keepers' Association on



THE WYOMING BUILDING.

Wednesday last, on the subject of sending an exhibit of British honey to Chicago, resulted in a unanimous resolve on the part of the association to take immediate steps for putting the project into practical shape. To do this, it is obviously necessary to secure the cordial co-operation, and, we trust, willing assistance, of bee-keepers themselves.

Without pledging ourselves to exact

details, it may be said that, in substance, the plan is to invite contributions of honey—good, of course—in quantities of five pounds and upward, to be forwarded in bulk or otherwise to a depot at a given center (probably Liverpool, as the port of departure), where it will be received by representatives of the British Bee-Keepers' Association, for bottling, package, and transhipment to Chicago. An important point to be borne in mind by gentlemen interested in the project is, that the honey sent *need not be the product of the exhibitor's own bees;* the only proviso being that the locality in which the honey is gathered must be stated, so that many who would have sent their own honey in a good season will, by purchasing from those less able to give away their produce, be enabled to further the scheme at a very small cost. Further, the name of each donor will appear on his portion of the exhibit.

Seeing that an opportunity of staging British honey alongside that of other countries, in so prominent a manner as the Chicago Exhibition offers, is not likely to occur again in our generation, we hope that our readers—with whom the matter may be said to entirely rest—will rise to the occasion, and lose no time in making known to the Secretary of the British Bee-Keepers' Association, or to ourselves, the extent to which they are willing to assist. The exhibit will, no doubt, be seen by several millions of persons of all nationalities; it also goes without saying, that American bee-keepers will welcome a good display from the mother country; and as all cost and trouble connected with it will, as already stated, be borne by the British Bee-Keepers' Association, we trust to hear without delay from intending donors, in order that an approximate idea may be arrived at with regard to the amount of space to be applied for. Preliminary inquiries may be addressed to this office, or to the Secretary of the British Bee-Keepers' Association, at Kings Langley.

Mrs. Atchley is a worker, as well as a great writer on apiarian subjects. She has just bought a typewriter, and you ought to see how well she can "write" with it. It is a pleasure to receive her typewritten letters. Dr. Miller is pretty good at it, but just wait until Mrs. Atchley has had a fair chance to show what a woman ean do.

Convenient Height for Hives.

In many apiaries the hives stand near the ground upon a piece of joist 3 or 4 inches wide, or upon bricks, one under each corner; in others, the hives stand a foot high, and, again, hives may be seen 2 or 3 feet high, perched on posts. As far as the bees are concerned, it does not matter whether hives be high or low, although, judging by the habits of the bees, the higher the hive is, the better they would like it. But the bee-keeper is the one to be accommodated by the position of the hive; he will place it at the height where it will be most convenient for him.

It is extraordinary that the hives in the majority of apiaries are not placed to give the bee-keeper the best advantage, owing, perhaps, to the idea held by some bee-keepers, that it is good—essential—to have the bees near the ground. It is laborious enough to work over a hive, often in the sun, often with an ugly colony, even if there be no occasion to stoop; but to go from hive to hive in an apiary, say of 50 colonies, and be obliged to stoop at a right angle, almost over every one, is the most "backaching" work any one ever undertook; indeed, the stooping, the continual strain, is not only wearisome, terribly wearing, but possibly dangerous in its results.

If a hive be placed in a chair, it will be found that work over and in it is easy, that there is little need of stooping. There is no reason why every hive should not be placed so that the bee-keeper may work over it without stooping. Every hive should have an independent support or standard unless it is absolutely firm. A bee-keeper placed 10 colonies of bees on two long pieces of timber set on their edges. He was obliged to change them, because if in working over colonies he let anything fall upon the pieces of timber, the jar was communicated to every hive and colony standing on them.

The best arrangement for bees is a platform upon posts sunk in the ground at frequent intervals. While a great shock at one end might be felt at the other, yet ordinary mishaps while working over a colony would not disturb the other colonies.

If the platform have a roof, it makes it all the better for the bees and the bee-keeper during the warm weather. The roof should be portable, and not be put on before June, because bees want all the sun they can get up to that time. After the first or middle of June, according to the season, bees ought to be in the shade.—JULIA ALLYN, in *Ohio Farmer*.

Ants and Bees as Communistic Insects.

Never among mankind can we find so absolute and complete absorption of the individual by the social group as in the cities of ants and bees, where individual property has never, it seems, been imagined. In these republics what one citizeness has for herself belongs to the others. Does a hungry bee meet one laden with booty returning to a city, she lightly taps her on the head with her antennæ, and instantly the latter hastens in a sisterly way to disgorge part of the nutriment provisionally stored in her own stomach.

Ants proceed in the same way as bees, but in addition the ant thus sustained is very careful to show her gratitude. "The ant who feels the need of food," says Huber, "begins by tapping her two antennæ, with a very rapid movement, upon the antennæ of the ant from whom she expects succor. Immediately they may be seen approaching one another with open mouth and extended tongue, for the communication of the liquid which one passes to the other. During this operation the ant which receives nourishment does not cease to caress the friend who is feeding her, continuing to move her antennæ with singular activity."

The collective system of property must have existed among ants and bees for many thousands of years, for, apart from cases of demoralization such as may for example be produced among bees by giving them a taste for drunkenness, these intelligent insects show the most absolute deference and devotion to social property. Their primitive selfishness has broadened out into a collective or patriotic egotism. But these very social species, with their more than Christian charity, have not reached this high degree of civilization at one bound. In the ant and bee worlds, as in our own, there are savages. There are at the present time certain species of ants ignorant of the division of labor carried so far among their civilized congeners.—*Property, its Origin and Development.*

That Advertising Pays, when judiciously done, no one who has tried it can possibly doubt. An advertiser who had a two-inch advertisement in the BEE JOURNAL for about three months this year, says without solicitation:

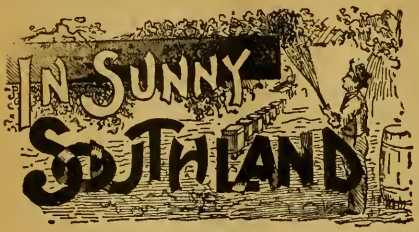
I am satisfied with the result of my advertisement in the AMERICAN BEE JOURNAL, that anything you issue is read by the bee-keepers.....The AMERICAN BEE JOURNAL takes the lead in everything, especially to the advantage of advertisers.

Another who inserts a three-inch advertisement for six months in the BEE JOURNAL annually, writes thus:

Every year I have to return money because I have more orders than I can fill, coming from the advertisement I put in the AMERICAN BEE JOURNAL for six months.

Friends, if you have anything of merit that you want to sell to bee-keepers, the foregoing shows you how to do it.

The Ladies' Home Journal, of Philadelphia, Pa., is perhaps the finest monthly home magazine in the world. If ordered before Jan. 1st, 1893, we can club it with the BEE JOURNAL—both Journals for one year—for $1.50, to a *new subscriber to both papers*. If you are *now* a reader of *either* the BEE JOURNAL or the "Ladies' Home Journal," we will send *you* the two for a year for $1.90. Be sure to say whether you have been taking the "Ladies' Home Journal" or not this year, when ordering through the BEE JOURNAL office. If a new subscriber to the BEE JOURNAL, you will receive it the rest of this year *free*; and the "Ladies' Home Journal" will begin with the January number.



CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Pleasantry—But Not "Scientific."

UNDER A. I. ROOT'S "high pressure gardening," the letters of his name have taken deep *Root* at the "Home of the Honey-Bees." See his letter heads. Well, when we see that vegetation is well *Rooted*, we may expect a vigorous "plant"—like the bee-hive factory of Bro. Root.

A BEE-KEEPER living in this county, not long since went out to *rob* his bee-gum. The bees objected to burglars coming after dark and taking their hard-earned booty, and stung their intruder badly, and run him away. He, to get revenge, took down his gun and shot the hive. Then he sat down in perfect quietude, with the consoling thought that he had his revenge. But the bees went ahead with their work the next morning, as though nothing had happened.

Preparing Bees for Winter.

South of Red river, in this sunny clime, November is the time to see to our pets for winter, as near the first of the month as we can. See that each hive contains a moderate colony, and about 20 pounds of honey, a good queen, and comfortable quarters. The hives should not face north in winter or spring, as our cold north winds are damaging to them. Tip the fronts of the hives a little down, so that water will not stand on the bottom-boards.

Our bees do need shelter from the high, cold north winds, as well as our stock. The south side of any building, high board fence, or timber is a good protection, and I think, if we look to our pets more closely, we will have less room to complain of spring dwindling, diarrhea, etc.

The nameless bee-disease has damaged quite a number of our Southern apiaries of late years, and I think that exposure to cold and sudden changes, and improper food, are the cause.

Remember that burnt or scorched food in winter is not good, but after spring opens up may be fed with perfect impunity. Small, weak colonies and nuclei can be successfully wintered, but in some winters it is necessary to take them into a warm building during our worst weather.

Arranging Honey in Stores, Etc.

As this is the season when most Southern bee-keepers are looking to the marketing of their honey, I will give my experience in that line.

Should you sell, or leave to be sold, your honey with your home merchants, you ought to volunteer to tastily arrange the display for them if they are not already versed in that line. A good way is to place a small, nice case filled with an average sample of your section honey, right in front of the show-case, on top of it, or where it will be seen by every customer. A small candy-jar filled with clear extracted honey, standing right on top of the case of comb honey is a nice bait, and if by transferring, or otherwise, you have some nice "chunk honey," it can be placed in a glass jar, and exhibited in some way. In this way we may aid our merchants in building up a nice trade in honey.

I have not described the fancy retailing cases, as they seem too expensive for us yet, and it is just beginning to pay in our State to produce comb honey in sections. Ten years ago I could sell nice "chunk" comb honey in our markets for just as much, and in some instances a little more than section honey, the purchaser not wishing to pay for the wood, as he called it, or thought he paid for the section.

I have at different times both sold, and left to be sold, honey at our stores in cities and country towns, and the clerks, or the proprietors, would put the honey under the counters, and if a customer did not call for it, he never would know there was any honey sold in that store; and after I found out what was being done, I have gone in and asked how they were getting along selling honey, when they would reply, "Oh, we seldom have a call for honey. We will not need any more this year." Then I asked to have the privilege of arranging

the honey as above described, and 50 pounds or more was sold in one week, where they seldom had a call before.

I now remember when we used to handle large quantities of honey, we used to experiment how to tastily arrange honey. A section must show up pretty well if it beats a nice jar of clear honey with a nice white chunk of comb honey in it. But a one-pound section is the proper way to have the honey stored, but I only wished to assist those with other kinds as well.

Should you place extracted honey on a market, it is well to post the dealer as to its liability to candy, or have a card on it telling about it, or some will be afraid of it.

Some Mistakes of Beginners.

Some people are unfortunate enough to have more money than brains. The man who goes into the bee-business, depending upon having his work done by hired help, will, in all probability, get severely left.

Some make a mistake by not taking the advice of the old bee-keepers, who tell us to start with a few colonies and increase them as our knowledge of the business increases. Some "get left" when they go into the queen-rearing business just because they see some one else making a success out of it.

Bee-keeping is a profession, and the man who starts with 200 or 300 colonies before he has learned the business, will be very liable to find it out.

I predict that the low price of cotton will produce a large crop of beginners in bee-keeping in the South, as cotton will not pay the expenses of raising it. There is a general stir among the farming classes, and they are going to try something else. C. B. BANKSTON.

Thorndale, Texas.

Bees that Had a Bath and Swim.

On page 574, Mr. Tarey speaks of several colonies of bees being submerged in water, and carried across the lot by it. He does not state the length of time they were under the water, but says he only lost 2 out of 11 colonies.

Last May I went into Jasper county, Tex., to transfer a lot of black bees from gums into new style of hives. I had a 2-horse hack, and was accompanied by my wife and an 18-month baby girl. We had 7 empty hives complete, also an observatory hive with one-frame of Italians, with their golden queen, all well fastened on the hack. After crossing Neches river (the boundary line between the counties) on a ferry boat, we took a road used only during low water, to cross a slough. We came to the slough, and not knowing its depth, plunged in. The team was soon swimming, and we were waist deep in water as we sat on the seat. The swim was perhaps 100 feet, not much current, and we landed safely, but thoroughly wet and well scared.

As soon as we were over our fright somewhat, we looked to our bees, and found them as wet as ourselves. I soon got the water out of the hive, and I do not think we lost a bee. They may have been under the water ten minutes in all.

GEORGE MOTT, M. D.

Spurger, Texas.

Producing Sex at Will.—One of our readers sends us the following questions:

1. Can a queen lay eggs at will that produce either sex? Having some doubt in regard to this matter, I shaved down a worker-comb close to the eggs, and gave it to a colony made queenless, and destitute of brood. The result was a batch of drones reared from eggs that otherwise would have been worker-bees.

2. Is it not reasonable to suppose that bees are able to take the sperm fluid from the worker-eggs? A. B. B.

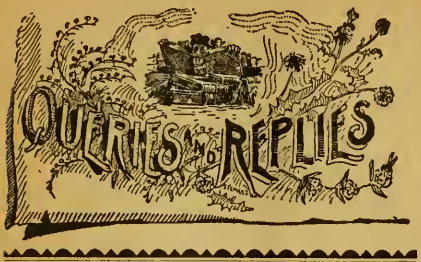
Prof. Cook replies as follows to the above questions:

1. I fully believe that the queen controls the sex at will. The eggs are impregnated that produce females, and she controls the delicate machinery that adds or retains the sperm cell. So I think she knows what she is doing.

In the case given, I believe the eggs were laid either by a drone-laying queen, or laying worker. Or else, perchance, all were destroyed and others added by laying workers.

2. I do not believe the workers can manipulate a sperm-cell. They would need a first-class microscope to see it, and very delicate fingers to manipulate it. Great and wonderful as they are, I cannot credit them with such skill or wisdom. A. J. COOK.

Great Premium on page 653!



Distance Bees May Profitably Fly in Search of Honey.

Query 844.—1. In your opinion, what distance from the hive do bees usually fly in search of honey? 2. How far may they go in order to produce the most and best honey?—Lucy.

1. One to 2 miles. 2. From ½ to 1 mile.—G. L. TINKER.

1. From 3 to 6 miles. 2. About 3 to 4 miles.—JAMES HEDDON.

1. From 2 to 3 miles. 2. From 1 to 2 miles.—J. P. H. BROWN.

1. From 1 to 3 miles. 2. From 1 to 2 miles.—W. M. BARNUM.

1. From 2 rods to 6 miles. 2. From 1 to 4 miles.—G. M. DOOLITTLE.

1. One to 2 miles. 2. Not farther than I have indicated in No. 1.—EUGENE SECOR.

Bees *usually* fly until they find nectar—2½ miles is a good range.—MRS. J. N. HEATER.

1. From a few rods to several miles. 2. It depends upon the flora, and not upon the distance.—H. D. CUTTING.

1. Two or 3 miles, if they don't find it nearer. 2. The further they are obliged to go, the less they will get.—R. L. TAYLOR.

1. Perhaps half a mile, perhaps 2 miles, depending upon the pasturage. 2. Possibly not more than 2 miles.—C. C. MILLER.

1. Should they not be able to find honey nearer, they will go 4 miles, and probably farther. 2. From ½ to ¾ of a mile.—J. M. HAMBAUGH.

1. Till they find it, if not too far. One season my colonies gathered a large surplus at a distance of about 2½ miles. 2. I don't know.—A. B. MASON.

One and one-half miles is a fair range, and perhaps as good as any for best results; but when honey is scarce, bees will fly 3 miles in search of honey, and where there is something to lead them on, they have been known to go 3½ miles.—MRS. L. HARRISON.

That depends upon the season, the weather, and the abundance of bloom near the apiary. Probably within a radius of 2 miles or less.—C. H. DIBBERN.

1. I have known them to fly 5 miles or more. 2. A radius of 1½ miles or so, would, I think, give the best results; but that, even, would depend upon the field itself.—J. E. POND.

1. From a few rods to 5 miles. I should prefer to have honey-plants within a mile. 2. I guess a mile, more or less. All answers to this will be speculative.—A. J. COOK.

1. If there is plenty of honey to be had near home, they will scarcely go over 2 miles, and but few that far. 2. But I have known them to go 5 miles and do good work.—E. FRANCE.

1. Their usual range does not exceed 1½ miles. 2. The distance has nothing to do with the quality of the honey, but they will produce the most if the field is not over ½ mile distant.—DADANT & SON.

Although bees may, and no doubt often do, go greater distances, I think that under most circumstances the greater part of the honey that bees store has been gathered within 1½ miles from the hive.—JAMES A. GREEN.

1. Much depends upon the pasturage. Usually they do not go more than 2 miles, and not often that far, if there is good pasturage nearer. 2. I think they cannot work to advantage on pasturage much more than 2 miles away. The distance can make no difference in the quality of the honey.—M. MAHIN.

1. This depends entirely upon location. We might keep our bees in a place where they would have to go 3 or 4 miles, but if flowers and nectar are plenty, possibly a mile is as far as they would go. 2. To produce the most honey I think from ¼ to ½ mile, as I have watched my bees right over a good patch of flowers within 200 yards of the apiary, and go a half mile and gather honey from the same thing. As to the best honey, I don't think it matters about distance, as honey gathered ten miles away would be no better than that gathered within ten steps of the

apiary, from the same flowers.—MRS. JENNIE ATCHLEY.

1. This is rather a difficult question to decide. The *practical* of the question cannot be settled on reports as to how far bees may *sometimes* be led by blooming plants or trees away from their homes, but rather by experience as to how wide a field do they ordinarily work over in securing a crop of honey. In my opinion, based on years of observation, the bulk of the honey crop gathered by the ordinary apiary, comes from a radius not exceeding one mile in every direction. That bees go further than this sometimes, does not prove anything to the contrary of what I have suggested.—G. W. DEMAREE.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

Nov. 17-19.—Missouri State, at Independence.
W. S. Dorn Blaser, Sec., Higginsville, Mo.

Nov. 28.—Allegany Co., at Angelica, N. Y.
H. L. Dwight, Sec., Friendship, N. Y.

Dec. 1.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec., Steel Creek, N. C.

Dec. 13, 14.—Michigan, at Lansing, Mich.
Geo. E. Hilton, Sec., Fremont, Mich.

Dec. 14, 15.—Eastern Iowa, at Maquoketa.
Frank Coverdale, Sec., Welton, Iowa.

Dec. 28, 29.—Vermont, at Burlington, Vt.
H. W. Scott, Sec., Barre, Vt.

1893.

Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.

Jan. 18, 19.—Colorado, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.

Jan. 12-14.—Minnesota, at Minneapolis, Minn.
A. K. Cooper, Sec., Winona, Minn.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITORS.

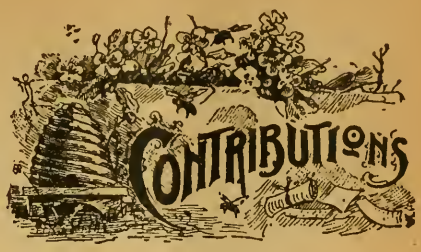
North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

There is Not One Person but what can secure at least *two* new subscribers to the BEE JOURNAL, and get the splendid Premium offered on page 653. Try it.



Adulteration of Honey—Need of Action by Bee-Keepers.

Written for the American Bee Journal

BY PROF. A. J. COOK.

It needs no argument to show that the greatest obstacle to success in the production of honey comes from the manufacture and sale of a spurious article as genuine honey. The question of wintering bees no longer purturbs the bee-keeping public. We know the cause and a safe and reliable cure of "foul brood," and with such weapons in hand, we no longer stand in helpless awe before this enemy of the honey-producer; the longest road finally turns, and so the fact of poor seasons must soon be a thing of the past; but with all the other impediments removed, success can never be assured, except it can depend upon a fair and reliable market.

That adulteration of extracted honey is very general, and that such spurious honey is put on the market as genuine, is certainly true. Byron Walker found this fact a most embarrassing bar to the successful sale of his honey in Detroit, in the winter of 1890. Last winter he found a similar condition of affairs in another large city.

Prof. Wiley's analyses by several able chemists, of honey secured in various markets, show that the practice is common and general. Thus we are confronted not with a theory, but a condition. Thousands of tons of so-called honey, manufactured not in apiaries, but by unprincipled vendors in our large cities, stand as a most discouraging bar to apiarian success.

The extensive production of doctored glucose, in the first place, does for the honey market what the wonderful development of the great West, agriculturally, does for the market of general farm produce—it gives a maximum supply, which is always murderous to prices. More than this, the supply is

largely of an inferior product, which, as ostensible honey, lessens general appreciation of honey, and thus gives the "black eye" to one of the most wholesome and delicious of all our food products.

Some of the "*Pure Strained Honey*" which Mr. Walker bought in the Detroit markets, and which was being made and sold by the carload in that city, and brought into our State convention to be tested, was as tasteless and insipid as so much glucose tinctured by a trace of real honey. Ought such a state of things to continue? I say by all that's good and just, *Emphatically, No!*

Again, this fact of adulteration is no secret. The public are aware of this wide-spread adulteration. Rightfully they distrust this product. Are they illogical, when they conclude that a man who will lie—sell a thing for what it is not—will or may also impose upon the public an article that is unwholesome and unfit for food? Thus, whether they are correct or not in the conclusion, the effect upon the honey market is most serious.

That starch-glucose—the most common adulterant—is a safe food, is certainly a grave question, which bee-keepers at least will answer in the negative. They see their bees reject this sweet if any other is to be had, and experience shows that it is not safe for bees as a winter food. Thus we may believe that the distrust felt by the public is not wholly a whim.

We thus see that this enemy is of no mean proportions. We see that it menaces the success of every bee-keeper, and it follows that bee-keepers should unite in one grand successful effort to utterly squelch it—to drive it from among us forever. I have not a doubt, but if we are united and determined we can do this.

> "For right is right, as God is God,
> And right must ever win;
> To doubt would be disloyalty,
> To falter would be sin."

The analyses made the past season prove beyond any question that all artificial mixtures of syrup and honey can be detected. Thus we are able to locate the evil, in all cases, when this fraud is practiced. Most, if not all, of the States have well-equipped chemical laboratories in connection with their experiment stations, where such analyses will be made free of charge, and so it will be practicable and easy for any one to investigate any suspected sample, and see whether it be spurious or genuine.

In addition to these State stations, the Government Department of Agriculture has a Division of Chemistry most ably manned; and the head of this division promises fullest aid to help the bee-keepers in their effort to stop this iniquitous adulteration. We are sure, then, that we may find any adulterated product, and can find who the manufacturer is, and just where he carries on his nefarious work. Thus we are already in possesion of one of the most important weapons whereby this valuable work is to be accompished.

We next need good laws which shall make it a serious misdemeanor—shall we not say *crime?*—to manufacture and sell *as honey*, some artificial product, the real value and make-up of which shall be kept from the public. This crime must be severely punished, by both fine and imprisonment. Many of the States have, already, such laws. The law in Michigan—see Act No. 254, Laws of 1881, Sec. 4—is as follows:

> No person shall mix any glucose or grape-sugar.....without distinctly marking, stamping or labeling the article, or the package containing the same, with the true and appropriate name of the article, and the percentage in which glucose or grape-sugar.....enters into its composition; nor shall any person sell, or offer for sale, or order or permit to be sold, or offered for sale, any such food, into the composition of which glucose or grape-sugar.....has entered, without at the same time informing the buyer of the same, and the proportions in which such glucose or grape-sugar has entered into its composition.
>
> Sec. 5.—Any person convicted of violating any provision of any of the foregoing sections of this Act, shall be fined not more than fifty dollars, or imprisonment in the county jail not exceeding three months.
>
> Sec. 6.—It is hereby made the duty of the prosecuting attorney of the State to appear for the people, and to attend to the prosecution of all complaints under this Act in all the courts in their respective counties.

Other States, as Massachusetts, New Jersey and New York have similar laws, as has also Ontario.

It seems to me desirable that every State should have such a law, so framed as to be most serviceable in the good work of entirely preventing this iniquitous business. Perhaps a United States law, which would be effective throughout the entire country, would be possible and desirable. Why should not this subject be brought up at all the State conventions, and at the National convention, and an ideal law be written out by some such capable person as R. L. Taylor, who is at the same time a bee-keeper, a lawyer, and a legislator; and a plan formulated to secure its enactment in all the States, and, if possible, by the

United States Congress? Here is good work to be done. I see no reason why there shall not be an active campaign all along the line, that we may have the best and most effective legislation in all the States, and in Congress. "Where there is a will there is a way." Where there is so desirable an end to be accomplished, there ought to be a tremendous *will*.

There is yet one more thing needful. The best of laws do not enforce themselves. Such enforcement takes time, money, effort, and is not always the most agreeable work. Thus we cannot, ought not, to expect any one person to attend to it. No one bee-keeper has the adequate time or money, and why should one work for all?

No! the National Bee-Keepers' Union is just the organization to do this work. Under Mr. Newman's very wise management, it has done most excellent service. Under his direction it can win still greater laurels. I know of no one so well qualified to make things lively as Mr. Newman, supported by the Union. I hope he will accept the responsibility, and be well paid for the work. If the thousands of bee-keepers will each pay a dollar, all this can be done, and the funds be more than enough to compensate all who engage in the service.

I believe here is a grand chance to advance not only bee-keeping interests, but the interest of right doing as well. Fraud and deception, which are the very foundation of all this adulteration iniquity, are stepping stones to all dishonesty and immoral practices; if bee-keepers can wipe them out, as above suggested, it will be just cause for rejoicing among all the people.

Agricultural College, Mich.

An Explanation Regarding Past Propbecies of Honey-Flows.

Written for the American Bee Journal

BY SAM WILSON.

On page 535, Mr. Thomas Johnson takes me to task. He says I hit it pretty well in 1891, but missed it badly this year, and that I simply tried to imitate 1891. I know I did not have a good chance this year to prove what I claim, to men that do not want to believe.

If Mr. Johnson will turn to page 580 of the BEE JOURNAL for April 28, 1892, and tell me why I said I did not have a good chance to prove this year (1892) that I could tell what I claimed to tell, and why in 1891 I said the northwest would have a failure, and the extreme southern portion of Illinois and Kentucky would have a good flow, and that it would be good in the East, and the best in central New York of anywhere in the United States—then he can tell of any good honey-flow long before hand, and especially of any failure. Nothing can turn a coming failure into a success, but bad weather can stop bees from work, as it has this year, when there was plenty of nectar for them to gather, if they could have gone out to work.

As to the proof of the above, the reports of bee-keepers from southern Illinois and Kentucky attest to the fact, and as to central New York, Mr. E. R. Root said in *Gleanings* that the yields were so great there that the bee-keepers would not report their yields for fear of an influx of bee-keepers from other parts of the country. So much for my predictions for 1891.

Let us return to 1892. *Gleanings* reports this year to be better than the last five years, from clover and linden, despite the fact that three-fourths of all the bees died last winter, and on account of the unprecedented wet and bad weather all over the western States, except western Iowa, where, I think, bees wintered and built up well. Mr. Johnson reported his bees in good condition (and I don't suppose he is any better bee-keeper than the average). It stopped raining in western Iowa, and was fine weather through clover and linden bloom, while it rained right on in the eastern part; the wonder is that they got any honey in eastern Iowa, as there bees were reduced three-fourths in numbers, and what were left were run for increase; and then it was cold and wet all the time through linden and clover bloom, but in spite of all that, the bees secured considerable surplus. As for me trying to imitate my predictions of 1891, I knew I could not do that, and so I stated, on page 580. I said then that the honey-flow would be more general, and who says it has not been so?

Mr. Johnson cannot prove me a "false prophet," neither does his honey-flow that he brags about, for he got it almost all from fall flowers, when I did not claim to tell anything about the fall flow. He talks about Mr. Frank Coverdale getting 40 pounds per colony on an average, when I find he got an average each year of over 200 pounds in 1886 and 1889, and one of those years it was all comb honey. When Mr. Johnson does that well, I want to hear from him.

I can tell him this winter sometime, whether or not it will be worth while for him to expect much of a flow from linden and clover next year; and I can tell him, as I did in 1891, when it is going to be a failure over any large section of country. I don't care how much I am ridiculed, I will prove, sooner or later, that I am right.

Cosby, Tenn.

Foul Brood and Bee-Interests in Ontario, Canada.

Written for the American Bee Journal

BY WM. M'EVOY.

While waiting for the train to take me to a village where I have to examine many apiaries that were bad with foul brood, in June last, I thought I would write a few lines for the AMERICAN BEE JOURNAL.

In the last three seasons I have examined over 500 apiaries in the Province of Ontario. For years I had been receiving private letters on foul brood, and knew that the disease was widespread over the Province. But when Messrs. F. A. Gemmill, D. Chalmers, A. Picket, J. B. Hall, C. W. Post, Wm. Couse, Wm. Wells, R. W. McDonnell, J. McArthur, Lewis Traver, J. M. Hughes, W. F. Clarke, H. Godard, S. Symonds, Henry Couse, L. J. Mullock, James Stewart, R. Kirby, J. Krienter, R. L. Patterson, J. M. Frey, J. Davis, and many others of our best bee-keepers had the search-light turned on to every bee-yard near them, it was one of the greatest surprises to every one to see what a terrible state our country had got into with foul brood.

I became greatly astonished, the more I went through the Province, to find such wholesale quantities of foul brood, and so many bee-yards in such a horrid state with the disease, and so few knowing that their colonies had the plague. I went in for curing every colony that I found foul brood in, as I felt that it would be a disgrace to me to have it said that I could not get every colony cured of foul brood, no matter how bad I found it, or at what time of the year it was. But, oh, such a time as I had! Talk about a person having an "elephant on his hands"—many a time I felt as if I had too many "elephants" on my hands. I had to get the foul brood out of the bee-yards, or burn them, and when others that knew nothing about the disease would tell the owners not to mind me, it would upset my plans for a time where the owners were foolish enough to heed them.

In most places I asked the owners to be sure to write and let me know how they were getting on with the curing, and that I would answer and explain everything so as to help them. Most of them did write, which caused me far too much writing, and the most of it was done long after I should have been in my bed. Did any of them make any mistakes? Well, I should say they did, and after all the warnings that I had given, some of them made some of the most stupid mistakes that it was ever possible for any reasonable men to make, and it was for that reason that I wanted to get letters from them, so as to see that everything was going on all right.

Did I get any abuse from any one? Yes; and in some places it became almost unbearable, sometimes, but I did not mind it afterwards, as I knew the owners had made a big mistake, and now these very men that once acted so unpleasantly, are among my best friends. Everywhere I go now, I get on finely, and the bee-keepers are curing their apiaries in grand order.

It would be a great surprise to "Uncle Sam," if the search-light was turned on to the bee-yards of the United States, but still a bigger one to "Johnnie Bull," as he would then find out that he had foul brood almost everywhere at "'ome." While we have been curing our apiaries, other countries have done but little.

SOME CANADIAN BEE-NEWS.

Mr. Awrey—our worthy commissioner—has done his work so well, and in such a nice manner, that he has turned the eyes of all our best bee-keepers towards Chicago, and when the time comes for them to exhibit their honey and wax, I believe they will down the whole world.

Some fruit-growers in many parts of our Province, had sprayed their orchards with Paris-green while the trees were in full bloom, and killed the bees by wholesale, that were working on the blossoms at the time. I knew that it would be of no benefit whatever to the fruit-grower, to spray at such a time, while it would be sure death to the bees if he did. I then saw that the only thing we could do to save the bees would be to get an Act passed preventing the spraying of trees while in bloom. At our annual meeting I got a committee appointed to wait on the Hon. John Dryden, Minister of Agriculture, to get an Act passed at once. As soon as the committee ex-

plained the whole thing to Mr. Dryden, he took hold at once, and he deserves much credit for the way he managed the whole business, and passed the first Act of its kind in the world, which will be a benefit to both bee-keepers and fruit-growers.

Mr. Allen Pringle is going to Chicago to take charge of the Canadian honey exhibit, and I believe that every bee-keeper will be pleased to see him there, as he is a man that is much respected by all who know him.

Mr. McKnight, who is both a practical bee-keeper and fruit-grower, is now editor of the bee-department in the *Canadian Horticulturist*—a journal that every fruit-grower should take; it is a credit to our country.

Mr. Gemmill, the President of the Ontario Bee-Keepers' Association, who has done as much for his country as any man in it, is looking well after the interests of all that write to him to have the foul brood apiaries attended to.

Mr. W. F. Clarke has a Bee-Keepers' College near the Ontario Agricultural College. He has everything in his grand little apiary that is needed, and I am pleased to see how the old gentleman "catches on" to every new and useful thing.

The *Canadian Bee Journal* is very much improved of late, and its editors are doing their level best, and making it of great value to the bee-keepers of Ontario. Mr. Corneil and Mr. Holtermann have written good articles on the qualities of extracted honey, and I hope they will write more on the same thing, and stir up every bee-keeper so as to stop that bad practice too many have of extracting thin, raw, unripened honey, which will ruin any honey market, and thus in the end kill all sales for the man that extracts unripe honey.

Woodburn, Ont., Canada.

Prevention of Robbing Among Bees—The Past Season.

Written for the American Bee Journal

BY IRVIN GROVER.

In this, as in all other evils, an ounce of prevention is worth more than a pound of cure. During my five years' experience in keeping bees in frame hives, I have never had a single hive robbed, and I have had as many as 70 colonies in my care one season. My rule is to keep all colonies strong, and a laying queen in each hive, as taught in "Quinby's New Bee-Keeping"—a valuable work for beginners.

The nearest I ever came to having a case of robbing, was just at the close of the basswood season. I was extracting, and the air was filled with bees, "nosing" around, trying to see what they could get. When I returned the combs to the hive, the bees swarmed around in great numbers, and nearly covered the hive. I had a smoker well lighted (and it is a good one, a 3½ inch Quinby), but I could not drive them away. I went into the honey-house, and put a tablespoonful of sulphur on the fire, and returned, and began giving it to them, right and left, which speedily brought them to their senses. When a puff would strike them, they would double up like a jack-knife, and drop to the ground, but would soon get up and go about their business, and soon all signs of robbing were stopped.

I now do not disturb my bees in the middle of the day, when there is nothing for them to do in the fields, but I do whatever is necessary early in the morning or near sundown.

REPORT FOR THE SEASON.

This has been a very poor season, yet I have secured 35 pounds per colony, spring count; but some bee-keepers, only a mile away, have not taken 10 pounds per colony, and complain of lots of robbing. One lost two out of three queens by robbing, that he had sent off for. He tries to increase too fast by dividing the colonies, which makes them weak, and in poor condition to defend themselves.

I think the blacks are the worst for robbing, although dark hybrids are nearly as bad, but the hybrids are better for storing honey in the sections than the blacks. But for this locality I prefer the Italians. They may not store any more honey in sections, but when I come to weigh them for winter, they are always the heaviest, and not much inclined to rob.

I am often obliged to leave my bees for a week at a time. My wife attends to them when necessary during the swarming season, and she says sometimes she enjoys it, and sometimes she doesn't.

Cooperstown, N. Y., Oct. 18, 1892.

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Wintering Bees in Cellars, Ventilation, Etc.

BY G. M. DOOLITTLE.

I think that my bee-cellar is about the thing in which to winter bees. My bee-yard slopes gently to the north (I wish it were southeast, but I had to take such as I had), while near the west end is a slight sag through which flowed a small brook in wet weather, but which was dry the larger part of the summer. This brook now has an underground passage, so as to be entirely out of the way. West of the brook is a knoll, or rise of ground, facing the east, and rising at the rate of about four inches to the foot. Into this knoll I dug about 30 feet, or so that the back end of the hole was about 10 feet deep, measuring straight up the west bank. This same hole was about 9 feet wide, and for a trial, it was boarded up at first, a roof put over, and 3 feet of earth put on top of the roof. Herein I wintered my bees quite successfully, thus proving the value of such a place for wintering bees.

When the boards became rotten I tore all down and put in a good wall of stone mortar, on top of which I put a good strong roof, which was covered with 3 feet of *dry* earth, and over the whole was a larger roof so as to keep the earth and all under it dry. Since then the "strong roof" rotted out, and I now have the cellar covered with flag stone, so that the whole is a permanent thing, and will last long after I am no more in this world.

The first cave or cellar did not have the outer roof, consequently the dirt was kept wet by rains and snows. I find the latter much better, as the dry earth seems to keep a more even temperature than did the former.

The east end wall is 24 feet from the west, and here is the entrance door, so that the cave is in reality only 24 feet long by 6½ wide by 7 feet deep, inside measure. Two feet out from the entrance door is another door, and still 2 feet further out is another door, and in front of this last door is an anteroom 4 feet square, which has a door to that, so I have to open four doors every time I go into the cellar. As these doors all fit nicely, I have three large dead-air spaces through which the cold air must pass to get into the cellar, and yet the first mentioned door is the coldest part of the cave or cellar, as is readily shown by the moisture collecting in drops upon it. After the bees are put in here, all is shut tight, and left so until spring after the bees are put out.

Before remodeling the cellar the last time, I put in a sub-earth ventilator 100 feet long, and some 4 or 5 feet deep; also a ventilator at the top, both of which could be controlled at pleasure. From much manipulation of these, through a term of years, I finally left them shut all the while, and as the bees did better with them shut, and as the temperature could be better controlled with them shut, they were left out entirely in the last construction, and I now would not have them back again on any account.

On no one point did I ever go with more caution or more "fear and trembling" than on this ventilation matter, so that no one need tell me that I "jumped at conclusions" regarding it. I am positive that a properly-constructed, wholly-underground bee-cellar needs no more ventilation than will naturally come through walls of mason work and the earth.

After the bees are put out in the spring, the doors are fastened open aud left so all summer, so that the heat shall dry all out as much as possible preparatory to another winter. By thus leaving it open during the cool and frosty nights of October, it so reduces the temperature of the cellar and ground around it that it stands about 47° after the bees have become quiet.

As winter proceeds it gradually lowers until it reaches 44°, varying only from 43° to 45°, no matter what the temperture is outside, whether 70° above zero for a week, or from 20° to 30° below zero for the same length of time. Herein is where such a cellar has the advantage over a cellar under a house, and it makes no difference as to the temperature, whether there is one colony or one hundred in this cellar. The whole is controlled by the temperature of the earth, or very nearly so.

Why I say "very nearly so" is, that to the west of the cellar, about one rod, is 30 feet of fence, which causes the snow to drift over the roof and cellar from 3 to 8 feet deep, and this snow has a little to do with the matter; but I have never known a lower degree than 41 to be reached in winters when we had no snow.

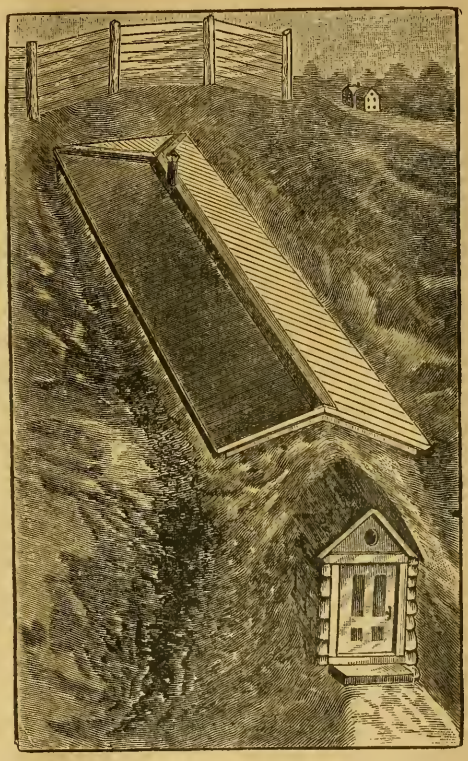
Unless a cellar would maintain an even temperature of from 41° to 47°, I should prefer bees out-of-doors in chaff-packed hives, and this temperature, too, whether bees were in it or not.

Where the bees are depended upon to keep up the temperature of the place they are in during very cold weather, it is very liable to be too warm during a mild spell in late winter or early spring, which causes more trouble in cellar-wintering than all else combined, as the bees will become uneasy and start brood-rearing at such times in spite of the opening of doors and windows at night, carrying in ice, etc., which can be done, besides when bees must "burn" honey to warm their hives and the room they are in, it causes a great loss of stores and vitality.

Mr. Hutchinson would not have the floor of the bee-cellar cemented. Neither would I; but there are bees dying of old age all the while, in any colony, and where many colonies are wintered in any cellar, these old bees coming out on the cellar-bottom to die, as they always do with the above temperature, make the bottom of the cellar very unpleasant to walk on, besides the foul smell from decaying bees is very offensive to me, whether offensive to the bees or not. To overcome this I evenly scatter a two bushel bag of sawdust over the floor every month, which not only keeps down all offensive smell, and prevents crushing the dead bees on the floor, but absorbs much of the moisture thrown off the bees as well.

Since using the sawdust as above, I can say that I am perfectly satisfied with my cellar.—*Review.*

Borodino, N. Y., Oct. 4, 1892.



Outside View of Doolittle's Bee-Cellar.

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☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Good Year for Honey.

There are not very many bee-keepers here, and those who do have them mostly let them die or freeze in the winter, and they do not think it pays to take a bee-paper. I had 9 colonies of bees the past summer, and took 1,000 pounds of honey. It has been a good year for honey here. HENRY BUSHBAUM.

Aredale, Iowa, Nov. 7, 1892.

Iowa Bees, and Bee-Lies, in Michigan.

I write the following letter for the benefit of the Iowa lawsuit man who testified that the bees shut off the light of day, and kept his house in darkness, and ate his ducks, which I read on pages 394 and 395 of the BEE JOURNAL:

MR. FOULKES, Cascade, Iowa.

Dear Sir:—Should you ever have the desire to sustain that bees are a nuisance, just send to me for the kind of statement you wish, or use the one I am going to make, viz.:

Oh, the bees done it! About three weeks ago I took a yoke of oxen and a cast-beam plow, and went about 30 rods from the house to do some plowing. I got along very well until my bees began to fly. O-h, the bees!

Then it began to get dark. I left my oxen, and started for my apiary, intending to shut up my bees, so as not obstruct my light, and hinder me from plowing. O-h, the bees done it!

But I soon found out that I had lost my course, and three days' hard travel brought me beyond their flight, and surprised was I when I learned that I was 32 miles from home! O-h, the bees done it!

It took me another day to get back, and to my great surprise my oxen were gone, plow and all. O-h, the bees done it!

I took my double-barrel shot-gun, and started for my apiary, but was too late. I found my plow in front of one of the hives, drawn into the mold-board. I raised the hive-cover, and there were my oxen completely cut to pieces. I began taking out the pieces, and by the aid of a little wax I stuck them together again, as perfect as ever, excepting the head and horns, which were eaten up by the bees!

O-h, the bees! They work just as well as ever, but I have to hire a man to lead them. I expect to get a great price for them, as I will exhibit them at the World's Fair in behalf of Mr. Foulkes, the Iowa lawsuit man. Who dares tell me that bees ain't a nuisance?

Don't forget my address.

Rodney, Mich. J. W. MILLER.

No Surplus—Introducing Queens.

In this locality we have no surplus honey, but bees, I think, have plenty to go through the winter. Sam Wilson came very close in predicting about the honey crop for this place, although I have wished very often that he would miss it here, because his predictions did not suit me, being for a bad honey year.

I would have Mr. S. E. Miller know that I have some very fine Italian bees, which produce pretty yellow drones; but may be he is not afraid of them mating with his queens, either.

The best way I have found to introduce queens, when they are once balled, is to put all the brood in the top story; after shaking off all the adhering bees, put empty combs below, with some thin cloth between. The bees will soon find themselves queenless and hopeless, and will be terribly demoralized. After an hour, slip the cloth a little, let the bees go up for a few minutes, and close back, repeating this two or three times until there is enough bees up to attend to the brood, then keep closed until the next day, then slip the cloth out, and let the bees go. They will be all right. This has been a perfectly safe way for me when no honey is coming in, such being the worst time to get queens balled. As there was no honey coming in this season to amount to much, I have equipped all my colonies with good, young queens, to be ready for the next season.

R. A. SHULTZ.

Cosby, Tenn., Nov. 5, 1892.

Experience with Laying Workers.

Last July I had a colony of bees that was not doing well, so I examined them, and I found that the queen was getting

old, so I killed her. In ten days from that time I examined them again, and tore all the queen-cells out. In four days more I looked them over again, and found a few eggs down in the lower part of the combs. This thought came to me—"Where did they get those eggs. They must have stolen them out of other hives."

I kept track of that hive, and in a few days they had a nice queen-cell started. That cell hatched out as nice a yellow queen as there was in the bee-yard, and they were hybrid bees. She was very prolific, and her bees were yellow and smart bees, for they understood stealing eggs out of other hives all right. They know how to get honey out of other hives. I have always heard it said that a mule never produced a colt; and I do not think that a worker-bee ever laid an egg. Give a colony of bees a good young queen, and they will accept her because she can lay eggs faster than they can steal them. So they say, "We will accept her." But give the bees a poor queen, and they will say, "No. We can steal faster than she can lay." So they kill her.

G. W. NANCE.

Peiro, Iowa.

[In speaking of "fertile" or laying workers, in his "A B C of Bee-Culture," Bro. Root says: "These queer inmates, or rather occasional inmates, of the hive, are worker-bees that lay eggs. Aye, and the eggs they lay, hatch too; but they hatch only drones, and never worker-bees." That is pretty good authority that a worker-bee *does* sometimes lay eggs. Besides, we never before heard of its being doubted. Mr. Nance will have a job on his hands, if he undertakes to prove that they do not lay eggs.—ED.]

Minnesota and Manufactured Honey.

I notice that Minnesota is put down as one of the leading States for honey this year. If that is true, there is not very much honey in the United States.

Last fall I put 65 colonies into winter quarters, and lost 6 in wintering. The spring was cold and wet, so I united some of the weak ones, and on Jan. 1st I had 53 colonies left, which were but a little better than on April 1st. They built up fast through June, as I had three acres of Alsike clover which they worked on early and late. This is a splendid plant for bees. I increased my apiary to 83 colonies, and obtained only 1,000 pounds of comb honey and 400 pounds of extracted. I have doubled back to 69 colonies for winter.

I took 460 pounds of comb honey to Minneapolis, and was offered 16 cents per pound in cash by a number of commission firms. One groceryman asked me if my honey was "pure comb honey." I told him that it was, and that comb honey could not be adulterated. I also told him that there was $1,000 offered to any one that would show a single pound of honey made by machinery, and show where it was made. He laughed, and called his partner, who took me back in the store and showed me a nice one-pound section of honey, and said the bees had never seen it! He said it was made in Dayton, Ohio; he had seen it manufactured, and had worked in the factory.

I told him that he could not make money any faster than to go to Medina, Ohio, and see Mr. A. I. Root, who offered the $1,000. This will be a good year for such a factory, as the Minneapolis market is nearly bare of white comb honey. I would like to have some one living near Dayton, Ohio, look up this matter, and report through the BEE JOURNAL.

I notice that the BEE JOURNAL has changed editors, but I do not see as it makes any difference, for it is the same "Old Reliable." It has been worth more than $1.00 a year to me the last four years. I advise every one I talk with about bees, to take the AMERICAN BEE JOURNAL.

It was cold and wet all summer here, but this has been the nicest fall I ever saw. It has been dry, but warm, with not much frost yet.

GEO. H. AURINGER.

Bonniwell's Mills, Minn., Oct. 18.

Almost a Total Failure.

The honey crop in the Shenandoah valley has been almost a total failure this year.

J. E. PITMAN.

Marlboro, Va., Nov. 1, 1892.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

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The Date on the wrapper-label of this paper indicates the end of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription to the *end* of next December:

Wallace Porter Dec92
Suffield, Portage co, Ohio

Convention Notices.

IOWA.—The Eastern Iowa Bee-Keepers' Association will meet at Maquoketa, Iowa, in the City Hall, on Dec. 14th and 15th, 1892. All are invited. FRANK COVERDALE, Sec.

COLORADO.—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 18 and 19, 1893. Election of officers and other important business will come before the meeting.
Littleton, Colo. H. KNIGHT, Sec.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m. on Monday, Nov. 28, 1892. All bee-keepers are invited to attend.
Friendship, N. Y. H. L. DWIGHT, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers' Association will hold its third annual session at the Court House in Charlotte, N. C., on Dec. 1, 1892. A full attendance is especially desired, and all those interested in bee-culture will have a hearty welcome.
Steel Creek, N. C. A. L. BEACH, Sec.

MINNESOTA—.The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan. 12, 13 and 14, 1892. The Thursday meeting will probably be a union meeting with the Horticultural Society which meets at the same place, commencing on Tuesday. A. K. COOPER, Sec.

VERMONT.—The eighteenth annual meeting of the Vermont Bee-Keepers' Assocciation will be held in the city of Burlington, Vt., on Dec. 28 and 29, 1892. Every one interested in apiculture is earnestly desired to be present. As a bee-keepers' association, we know no State lines, but will gladly welcome all that come. Programs will be published soon. Holiday rates on the railroads.
Barre, Vt. H. W. SCOTT, Sec.

MISSOURI.—The 7th semi-annual convention of the Missouri State Bee-Keepers' Association, will be held at the Court House in Independence, Mo., on November 17, 18, and 19, 1892. An Interesting and well-arranged programme has been prepared, and we extend a cordial invitation to all bee-keepers to meet with us in this very important convention.
W. S. DORN BLASER, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected; President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

THE NORTH AMERICAN Bee-Keepers' Association will hold its annual Convention in Washington, D. C., near the end of this year. The exact date cannot yet be given. Mr. Frank Benton is keeping close watch, and others are watching for him, to learn when some other Society will meet in Washington, so that the North American may meet in conjunction with it and thus secure reduced railroad rates. The Secretary is at work arranging a programme, and as soon as the exact date for holding the Convention can be given, the announcement will be made.
Flint, Mich. W. Z. HUTCHINSON, Sec.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, November 12th, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c,, according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Good demand for fancy white comb, 18@19c.; No. 2, 15@16c.; No. 3, 13@14c. Buckwheat, 12@13c. Fancy white extracted, 9c.; amber, 7½@8c.: dark, 7c.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand good for all kinds of extracted honey at 5½@8c., according to quality. Arrivals not equal to demand. We dare not solicit new trade. Comb honey is scarce, at 15@16c. for best white.
Beeswax—Demand fair, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Market is a little slow, a car of California comb honey having arrived, and selling at 16@17c., and the Vermont selling slowly from 17@18c. Extracted, 8@9c.
Beeswax—27c. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—Comb is arriving freely, and demand is good. Fancy white 1-lbs. 15@17c.; 2-lbs. 13@14c. Fair white 1-lbs., 13@14c.; 2-lbs. 12c. Buchwheat 1-lbs. 11@12 2-lbs. 10c. Extracted—clover, basswood, and orange bloom, 7½@8c. Southern, 65@75c. a gallon. Beeswax—26@27c. H. B. & S.

ALBANY, N. Y.—Honey more plenty and market some lower on all grades except white comb, which sells at 15@17c.; mixed, 13@14c dark, 10@11c. Extracted, white, 7½@8½c.; amber, 7@7½c.; dark, 6½@7c.
Beeswax, 27@28c. H. R. W.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium ? Read the offer on page 647.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT, 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMONS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Your Neighbor Bee-Keeper

—have you asked *him* or *her* to subscribe for the BEE JOURNAL ? Only $1.00 will pay for it regularly to *new* subscribers from now to Jan. 1, 1894 ! And, besides, *you* can have Newman's book on "Bees and Honey" as a premium, for sending us two new subscribers. Don't neglect your neighbor ! See page 653.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED.—We want a printing press, and will trade Dov. hives for same. Let us hear from you. LEVERING BROS.,
18Atf Wiota, Cass Co., Iowa.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas

FOR SALE OR EXCHANGE.—100 colonies of Italian Bees in 7 and 8 frame Langstroth Hives. They have lots of honey for winter, and are in fine condition.
Address. J. A. KELLER,
20A2t Hammond, Lake Co., Ind.

"The Winter Problem in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apiary. Price, postpaid, 50 cents; or given as a premium for getting one new subscriber to the BEE JOURNAL for a year. Clubbed with the BEE JOURNAL one year for $1.30. Send to us for a copy.

The Globe Bee-Veil, which we offer on page 621 of this number of the BEE JOURNAL, is just the thing. You can get it for sending us only three new subscribers, at $1.00 each.

Advertisements.

A Blind Man Can See

WHEN it is properly presented to him. Have you ever figured out how much you can save by shipping your products to a first-class and reliable commission house?

We are wholesale dealers and shippers of all **Farm and Garden Products,** including **HONEY and BEESWAX.** Write for quotations.

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D. NEEDHAM'S SONS
Inter-Ocean Building,
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RED CLOVER BLOSSOMS
And Fluid and Solid Extracts of the Blossoms. The BEST BLOOD Purifier Known. Cures Cancer, Catarrh, Salt Rheum, Eczema, Rheumatism, Dyspepsia, Sick Headache, Constipation, Piles, Whooping Cough and all Blood Diseases. Send for circular.
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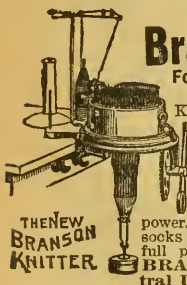

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Branson Knitter
For Family and Manufacturers Use
PRICE $25.
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Best Knitting Machine EVER MADE.
Makes seamless hose, double heel and toe, runs by hand or power. Capacity 6 to 8 doz. pairs of socks per day. A child can use it. For full particulars address JAMES L. BRANSON & BRO., 312 Central Union Blk., Chicago, Ill.
THE NEW BRANSON KNITTER.

Bee-Feeders Given Away.

Best Bee-Feeder. Most convenient. Saves feed. No daubing or drowning. Two to seven Feeders full may be given a colony at one time, which will be stored in the combs in 10 hours. Price, per pair, 30 cents; by mail, 40 cents; per dozen, $1.60. Has a sale of 2,000 per month.

We will give, as a Premium, 2 of the above Feeders, postpaid, for sending us one new subscriber to the BEE JOURNAL for a year, at $1.00. This is a cheap way to get some good Feeders.

GEORGE W. YORK & CO.,
199 Randolph St., - CHICAGO, ILLS.

HONEY KEGS.

These Kegs are made for Extracted Honey, need no waxing, but should be well scalded with boiling water before using—not soaked.

5 gallon, holds 50 lbs. 40c.
Wooden Bungs, 1 cent each.

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PATENT WIRED COMB FOUNDATION
HAS NO SAG IN BROOD FRAMES.
THIN FLAT BOTTOM FOUNDATION
Has no Fish-bone in Surplus Honey.

Being the cleanest is usually worked the quickest of any Foundation made
J. VAN DEUSEN & SONS,
Sole Manufacturers,
Sprout Brook, Montgomery Co., N. Y.
Mention the American Bee Journal.

GLOBE BEE-VEIL

By Mail for $1.00.
A center rivet holds 5 spring-steel cross-bars like a globe to support the bobinet Veil. These button to a neat brass neck-band, holding it firmly.
It is easily put together; no trouble to put on, or take off. An absolute protection against any insect that flies. Will go over any ordinary sized hat; can be worn in bed without discomfort; fits any head; does not obstruct the vision; folds compactly, and can be carried in the pocket; in short, it is invaluable to any one whom flies bother, mosquitos bite, or bees sting.

Extra Nets, 50 cents each.

CLUBBING OFFER.

We will send this Veil and the Bee Journal one year for **$1.75.** Or, we will give the Veil **Free** for three (3) **New** Subscribers to the Bee Journal, with $3.00 to pay for them.

GEORGE W. YORK & CO.,
199 Randolph St., - CHICAGO, ILLS.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., NOVEMBER 24, 1892. NO. 22.

"**Some Murmur** when their sky is clear,
And wholly bright to view,
If one small speck of dark appear
In their great heaven of blue;
And some with thankful love are filled,
If but one streak of light,
One ray of God's good mercy, gild
The darkness of their night."

Mr. G. K. Hubbard, of Fort Wayne, Ind., is visiting in Southern California this fall. Mrs. H. accompanies her husband, and doubtless they are having a delightful time. Mr. Hubbard is well known as a wide-awake dealer in bee-keepers' supplies. Perhaps he will write an account of his California trip for the benefit of our readers.

The Adulteration of Honey is a subject of such tremendous importance—involving the very existence of the pursuit of bee-keeping—that the best minds of the bee-fraternity must be brought to bear upon it, by way of a discussion of the best means to employ in order to accomplish the desired end—the annihilation of the criminals who defraud the public by imposing upon them adulterated honey for the pure. Last week Prof. Cook opened the subject anew, and this week the former editor of the BEE JOURNAL, Thomas G. Newman, on page 697, continues the discussion in his usual vigorous manner.

That something must be done, and that right speedily, is quite evident to all who are in the least interested in the industry of bee-culture. The great questions are—"*What* shall be done?" and "*How* shall we proceed to accomplish it?" The final decisions must be almost unanimous, if we expect to accomplish anything of value. The undertaking will be a large one, but victory will be the inevitable result of the efforts of bee-keepers, if they move upon the common enemy in solid phalanx, and with a determination begotten of the righteousness of their cause.

Let all who have valuable suggestions to offer, please do so now, so that at the coming winter bee-conventions some definite action may be taken, that shall result in the final overthrow of the nefarious adulterators, and the placing again of honest honey upon our markets.

The Ladies' Home Journal, of Philadelphia, Pa., is perhaps the finest monthly home magazine in the world. If ordered before Dec. 20th, 1892, we can club it with the BEE JOURNAL—both Journals for one year—for $1.60, to *either old or new subscribers.* If you are a new subscriber to both JOURNALS, you will receive ours the rest of this year *free;* and the "Ladies' Home Journal" will begin with the January number.

Future of Bee-Keeping.—Mr. C. H. Dibbern, the very practical and helpful apiarian department editor of the *Western Plowman*, comments so sensibly upon the past few poor seasons in bee-keeping, and also looks so hopefully toward its future, that we feel that every bee-keeper in the land should have an opportunity to read what he has to say.

This is a subject that interests every honey-producer, hence we call particular attention to the following paragraphs, written by Mr. D., who has had 25 years' experience in the business, has been through all its "ups and downs," and now says that he knows of "no other industry that offers so many opportunities to a poor man as bee-keeping to get a start in life." Here is what he says on the subject:

What about the future of bee-keeping? It is true the last few years have been rather poor over a part of our country, and no doubt many have become discouraged, and turned to something else. There has been plenty of hard work, and great fortunes have not been made, and yet the future is bright with promise. The seasons certainly will not always fail, and the "good old years" will surely come again, when "the fields will laugh with a harvest."

The bee-keepers who have studied the various problems of the business, have learned much during the last few years that will be turned to some account hereafter. In our locality there is no reason why the seasons should not be as good as they used to be. In fact, there are many reasons why they should be better. More land is being used for pasturage year after year, giving the white clover a chance. Alsike clover is also being cultivated to some extent, and sweet clover has "come to stay" in all the out-of-the-way nooks and corners. More basswood and honey-locusts are growing up than are being cut down, and yet the last few seasons have been poor for some cause. Climatic causes have had more to do with these failures than any other one thing.

We believe it was the late M. Quinby who said: "Get the bees, and at some time every year they will furnish the honey." That has not proved true in late years. For several years we had hives overflowing with bees all summer, only to be obliged to feed them up in the fall for winter. But all this will be changed again. Those who stick to the business through thick and thin are the ones who will succeed.

Just now some are anxious to get out of the business; others are going to California and other favored climes, and are offering their bees at ridiculously low figures. This will be a good chance for some one to get a start, and no doubt some one will take advantage of it. After more than 25 years' experience we know of no other industry that offers so many opportunities to a poor man as bee-keeping to get a start in life.

The World's Fair Women

"Souvenir" is the daintiest and prettiest book issued in connection with the World's Fair. It is by Josephine D. Hill—a noted society lady of the West—and contains superb full-page portraits and sketches of 31 of the World's Fair women and wives of prominent officials connected with the great Fair. It is printed on enameled paper, with half-tone engravings, and is bound in cloth, and also in black, red, white or blue leatherette, gold lettered. Just the thing for a Christmas gift to your friend. We will send it postpaid for $1.00, or give it for *two* new subscribers to the BEE JOURNAL for a year, at $1.00 each. Every woman will want a copy of this book, we feel sure.

Bees in a Conservatory.—Carrie B. Aaron, of Philadelphia, Pa., writes us a very interesting report of her experience with bees the past season. At the end of her letter she asks a few questions, which show that she proposes carrying on some profitable experiments during the coming winter. Her letter is as follows:

On the 9th of last June I commenced bee-keeping on a small scale with one hive of Italian bees, desiring to begin at the bottom and gradually, but rapidly, acquire that knowledge which will come to all who devote the greater part of a summer to the close study of the habits of bees. The success which followed has been more than anticipated, as

there are now three strong colonies well supplied with winter stores.

Although my bees are situated in the heart of the city, on a third-story balcony, far removed from any pasture, the original colony yielded about 50 pounds of white comb honey of delicate flavor.

One of my queens was reared by Doolittle's plan, and although it is a method which requires a combination of patience, nerve and faith in a novice, where the space for manipulation is extremely limited, it is certainly one which will insure the best queens, and I look forward with keen pleasure to the coming summer for increased knowledge and space wherein to practice queen-rearing.

For this winter's experiments my baicony has been partly enclosed in glass with arrangements for heating. One colony is to continue active all winter, for purposes of study, relative to food preferred by the bees. If any of the BEE JOURNAL correspondents have had experience in studying bees during the winter in a glass enclosure, I would appreciate any information given in regard to management.

The AMERICAN BEE JOURNAL comes to me each week, and is always read with much interest, and referred to frequently. Answers to the following questions will be thankfully received:

1. What winter flowering plants could be placed in my conservatory, which would be most attractive to the bees?

2. Would the limited facilities for flight have a bad effect upon the bees, if light, heat, food and ventilation were properly arranged?

3. Would regular feeding result in the production of drones? and, if so, could fertilization take place within the conservatory?

4. Do flowers in a green-house, under artificial heat, yield the same amount of nectar that they would under natural circumstances? CARRIE B. AARON.

Philadelphia, Pa.

The foregoing questions were referred to Prof. A. J. Cook, of Agricultural College, Mich., who has kindly replied to them as follows:

The investigations which Mrs. or Miss Aaron proposes to carry forward are certainly very interesting, and we may wish her all success.

1. There are many flowers of our conservatories that furnish nectar, notably poinsettia, which secretes nectar so abundantly that we have been able to collect enough for analysis; and mignonette. There must be many others, as Mr. Root found a conservatory in New York city, where bees were kept all winter, specially to work on the flowers, and so increase seed production. I would suggest that the questioner correspond with Mr. A. I. Root, of Medina, Ohio, and learn just where the conservatory is; and as she is so near, she could easily visit it.

2. I should not expect bees to prosper in a green-house, but as "nothing succeeds like success," if it has succeeded in New York city, it will doubtless succeed in Philadelphia.

3. If the colony prospered sufficiently, no doubt drones would be produced, but there is much doubt if such would be the case. From quite extensive experimentation, trying to mate bees in our conservatory, I question if it can ever be made a success. The drones seem alarmed, and pay no possible heed to the queens. I do not believe mating bees in confinement can ever be made a success.

4. That flowers in a conservatory do secrete abundant nectar, is proved by the poinsettia already referred to. The experiments performed by Prof. L. H. Bailey, of Cornell University, give added support to this view. It is probable that even artificial light would result in producing nectar, as well as in vigor of growth. Bee-keepers will watch the results of this experiment with no small interest. A. J. COOK.

"Bees and Honey"—page 685.

Another Hive has been patented, this time by Mr. John Conser, of Missouri, dated Sept. 27, 1892. After describing the improvements, the claims of Mr. Conser are set forth as follows:

1. The combination of a hatching-box provided with compartments adapted for the reception of brood-frames, hives arranged adjacent to the hatching-box, and having brood-frames adapted to be placed into the compartments of the hatching-box, and conductors connecting the hives with the compartments of the hatching-box, and provided with queen-excluders, substantially as and for the purpose described.

2. The combination of a hatching-box provided with an opening, a hive arranged adjacent to the hatching-box,

and provided with an opening, and a queen-excluder connecting the box and the hive, and composed of two blocks secured together, and having their opposed faces provided with recesses, a perforated plate interposed between the blocks, and tubular conductors extending from outer faces of the block and adapted to fit in the openings of the hatching-box and the hive, substantially as described.

3. A bee-escape comprising a board provided with a central opening, and having recesses arranged at the sides of the opening, an upper plate secured to the board and arranged over the central opening, and provided with openings, a lower plate secured to the board and arranged below the central opening, and the series of angle-pieces interposed between the plates and arranged in the form of a star, and forming contracted bee-openings, substantially as and for the purpose described.

Some Very Kind Words have been said editorially in all the bee-periodicals regarding the recent improvements in the general appearance of the AMERICAN BEE JOURNAL. We have appreciated all such references very much indeed. The following is the latest, and comes from the November number of the *American Bee-Keeper:*

The AMERICAN BEE JOURNAL certainly shows an instillation of young blood in its editorial department and general make-up. It now appears with an engraved title page, which adds very much to its general appearance. The different departments also have new engraved headings. Friend York's face appears at the head of the editorial column in a "Globe" veil, and the column is entitled "Editorial Buzzings." We suppose the illustration goes to show that the editor is impervious to what his contemporaries may say of him, good, bad, or indifferent. We hope, however, he will hear only good of himself.

The "supposition" in the latter part of the paragraph is quite true. So long as we live our motto—"Do right and fear no one"—we shall not worry about what others may say of us. We expect to stick to that motto through life, and can only trust that we may be so fortunate as to enjoy the "hope" so kindly expressed in the last sentence above.

Sweetening the Neighbors by giving them honey is beautifully commented on by Mr. John F. Gates, in the *Canadian Bee Journal.* He says it is a most excellent way to keep on good terms with them, and appropriately calls it a "peace recipe," the bee-keeper furnishing the honey which the "recipe" requires.

He mentioned the fact of his neighbors shedding tears, when, having sold his farm, he removed to another part of the country. Among other things that were suggested, came the inquiry, "Who will give us honey when Mr. Gates is gone away?" He says: "The thought never occurred to them that my bees sometimes were too inquisitive in their affairs, and not infrequently in a pointed and painful way. But giving your neighbors honey is but a small part of this recipe for peace; in fact, it merely opens the way, and is only incidentally connected with the greater and higher aim which all should have in view in bringing others to feel and realize what kind of life we should live."

It pays to be neighborly, and nothing will so win the good-will and insure the kindly interest of neighbors, like catering to the "sweet tooth" which each one of them possesses. Nothing is ever lost in so doing, while often very much is gained.

A Honey-Day Edition of the Longmont, Colo., *Times* was issued after the late meeting of the Colorado State Bee-Keepers' Honey-Day meeting, held at that place. This shows enterprise, and a great interest in the pursuit. It contained the portraits of seven prominent local bee-keepers, and four apiaries. All told, there are eight pages 11x15 inches in size, devoted to "Apiculture." On another page of this issue of the BEE JOURNAL, we publish an article about bee-keeping in Colorado, written by Mr. H. Knight, the efficient Secretary of the association. We hope to be able to publish other essays read there.

The Current of Life.

Don't look for flaws as you go through life,
And even when you find them
It is wise and kind to be somewhat blind
And look for the virtues behind them ;
For the cloudiest night has a hint of light
Somewhere in its shadow biding ;
It is better by far to hunt for a star
Than the spots on the sun abiding.

The current of life runs ever away
To the bosom of God's great ocean,
Don't set your force 'gainst the river's course
And don't think to alter its motion.
Don't waste a curse on the universe—
Remember it lived before you ;
Don't butt at the storm with your puny form—
But bend and let it pass o'er you.

The world will never adjust itself
To suit your whim to the letter,
Some things must go wrong your whole life long,
And the sooner you know it the better.
It is folly to fight with the Infinite,
And go under at last in the wrestle ;
The wiser man shapes into God's plan
As the water shapes into the vessel.
—Selected.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Not Lost Confidence in Bee-Culture.

I did not have one swarm from 50 colonies this year, nor did I get a pound of honey, but I had to feed 600 pounds of sugar for stores. Still I have not lost confidence yet. I intend to make bee-keeping a specialty.

CHAUNCY REYNOLDS.

Fremont, Ohio, Nov. 11, 1892.

Wintered on Honey-Dew, Etc.

I wintered my bees on honey-dew last winter, and reported in the BEE JOURNAL that they were dying very fast, so much so that I became alarmed, and took them out of the cellar the first warm day in February. They had a lively time, and as the weather continued warm, and they could fly every few days, the honey-dew seemed to do no further damage. I lost but one colony in the cellar, but lost 3 more by spring dwindling, and at the beginning of the white clover harvest I broke up 2 more to strengthen the balance, so that I had 22 colonies to begin the harvest with. I have stored 2,000 pounds of extracted honey. I have now 29 colonies in good condition to go into winter quarters.

FRED BECHLY.

Searsboro, Iowa, Nov. 12, 1892.

He Likes Yellow Bees.

I have 22 colonies of bees. My increase is due to the queens I bought from a Texas queen-breeder. But, on the other hand, two good swarms left me, and one of them had a yellow queen. My experience with bees is, the better the bee the better the result, and the yellower the queen the better it suits me.

J. L. BOWDISH.

Oxford, Kans., Nov. 11, 1892.

Hybrids and Blacks Did the Best.

I had 6 colonies of bees, spring count, and got 200 pounds of comb honey and 180 pounds of extracted honey. That is more than bee-keepers secured around me this year, that had the same number of colonies, Good for the hybrid bees and blacks. They are the bees for this country. I tried a colony of Italian bees, but they did not do well in gathering honey. My hybrids beat them "all hollow."

FRED L. NUTTING.

North Dexter, Maine, Oct. 30, 1892.

Death of a Young Bee-Keeper.

God has seen fit to take from me my little son, Chester Brenner, aged 10 years, who has been a great help to me the past summer in the apiary. I gave him one colony of five-banded Italians, which stored for him 24 pounds of nice comb honey. He was making preparations for another season, to take charge of my apiary of 15 colonies.

C. W. BRENNER.

Newburgh, Ind., Nov. 14, 1892.

[Our earnest sympathy is extended to Bro. Brenner in his sad loss. "What a gathering that will be" "when we all meet at home, in the morning." Yes, many are the loved ones awaiting all of us "over there," who have gone on before, and will welcome us when we are called to the "better land."—ED.]

CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

The Bee-Meeting at Dallas, Texas.

In the forenoon of Oct. 27th, the bee-keepers assembled in the Hunt Company's exhibit hall, and a committee of three appointed to pass on and judge the honey that was entered for competition. J. D. Givens, of Lisbon, A. Branshaw, of Dallas, and Mrs. Jennie Atchley, of Floyd, were selected to judge both the honey and bees. W. R. Graham, of Greenville, carried off the blue ribbon on the best section of honey, and J. T. Corbet on second best. The latter also took first premium on extracted honey and beeswax.

Dr. W. K. Marshall, of Marshall, took the first prize on the best colony of Italian bees. The judges thought he had a very fine queen. W. R. Graham was awarded second prize.

J. D. Givens had a very fine nucleus of five-banded bees, but was not competing. After the bees and honey were passed upon, the crowd dispersed, with the understanding that we should meet in a room on the third floor of the main exhibition building prepared for the occasion.

Promptly at 1:30 p.m. the meeting was called to order by the President, W. R. Graham, and as we were crowded for time, only having a few hours to meet, proceedings at once began.

BEE-KEEPING IN THE SOUTH.

The question-box was then opened. The President asked, "Is the bee-business on the increase in the South?" The answer came from all sides that scientific bee-keeping was on the increase rapidly, in that the old, loose, slipshod, log-and-box-hive bee-keepers were losing ground, and giving way to the modern and more profitable way of keeping bees, using the movable comb hives, and caring for the bees as we would our other stock.

CROP REPORT FOR 1892.

Next a crop report was taken. About 500 colonies were represented, and the average per colony was 21 pounds, about half comb and half extracted, which shows we had a very poor season.

LARVÆ USED IN GRAFTING QUEENS.

While the crop report was being taken, the question list was completed. Dr. Marshall asked Master Willie Atchley how he could tell when he was grafting queens, whether he was using a drone larva or a queen larva. Willie answered that he did not use either, that he used a worker larva. Then he was asked, "How do you know whether you are using a drone or worker larva?" He promptly answered that he knew it was a worker larva because it was in a worker-cell, as a good queen did not lay drone-eggs in worker-cells.

This question brought out an interesting discussion by W. H. White, J. D. Givens, S. J. Darby and others, on whether the bees had the power to change the sex of an egg, and it was decided that they had not, as the queens and workers were reared from the same eggs, and were precisely the same sex; the queen being fed on richer diet, and having a large, roomy cell, she matured faster, and it gave her the power of becoming impregnated and taking up the duty of egg-laying, while the worker had barely food enough to put her through, and a small, tight cell which makes her a dwarf, while if all the larvæ had the privilege of subsisting upon the rich food and large roomy cells, they would all be mothers, and no workers.

QUEENS FROM OLD OR YOUNG MOTHERS.

W. H. White asked, "Are the queens reared from a queen in her last days, or from a queen three or more years old, as good as those reared from a young mother?"

Dr. Marshall thought that probably the queens would be somewhat weaker reared from the old mother. So did W. H. White, but J. D. Givens, Mrs. Atchley, W. R. Graham and others thought not.

DIFFERENCE IN YIELDS OF COLONIES.

"What is the cause of one colony gathering more honey than another when two are placed side by side and given the same chance?" was asked. The general answer was, that it was in

the working qualities of the bees, or the fault of the queen.

STARTING IN BEE-CULTURE.

Dr. Marshall then gave a talk on starting in bee-culture. He thought bee-keeping had now become self-sustaining, and that to start and make a success of it, the beginner should commence as cheap as possible, and take advantage of all the new improvements, study and observe closely, and not try to start too extensively, for if a failure should occur, he would not lose so heavily as if he had started more largely.

BEESWAX FROM OLD COMBS.

Mrs. Atchley gave her plan of making beeswax when the combs were too old and hard to melt well in the solar extractor, as follows:

Take a copper-bottom vessel, or an iron kettle, and place it on the fire filled with water; when it boils, put the old, black combs into a sack made of an old coffee-bag, and as it melts down put in more comb, then when the wax rises skim it off and pour into a tub of clear, cold water, and as it touches the cold water, it will cool instantly enough, so you can take the wax up and work and rinse it as you would a cloth, and by this process we can get all the impurities out. Ball it up and lay into another vessel until you are through, then melt and mold to suit you. The wax from old black combs will then be almost as nice as that made by the solar plan.

QUEENS FROM WHICH TO BREED.

J. D. Givens and W. H. White discussed the question of "Breeding Queens." Mr. Givens thought that a breeder should be in her second year. After they thoroughly discussed the question, it was decided that a queen in her second year was at her best as a breeder.

Mr. White asked, "Will a queen that has been confined, or kept in a contracted brood-chamber, be as good a breeder as if she had not been so kept?" Mrs. Atchley thought she would be just as good, if not better, as her constitution would hold out better.

MAKING HONEY-VINEGAR.

Next came a talk on honey-vinegar. Dr. Marshall said that he, one year, made and sold 100 barrels of honey-vinegar, and thought it as profitable as the honey. He made into vinegar a large amount of dark honey that would have been almost unsalable.

Mrs. Atchley makes a barrel or two of good vinegar every year from the cappings and broken pieces of honey, and rinsing all vessels that had contained honey, and pouring into a barrel of rain-water. She thinks it is superior to any vinegar, especially for table use.

QUEEN-REARING.

Mrs. Atchley was requested to read an essay that she had prepared on "Queen-Rearing," which is condensed as follows:

As some of our noted writers have said, "Around the queen centers all there is in bee-keeping," with worthless queens our time is lost, and bee-keeping is a failure, as good queens can be reared by almost any of the plans given. I will state that if the operator fails, it is his fault, and not the fault of the bees or the method, as we should see that all our queens are reared from larvæ not more than one day old. See that the queens are well provisioned, the cells well shaped and properly built out, and I will assure you large, long-lived, and prolific queens, which is the foundation of the bee-business.

BEE-KEEPING FOR WOMEN.

Most readers of bee-papers have already seen this subject exhausted, so I shall offer no further apology for using it than to say that I have been requested to do so. Between man and woman I see no occasion for a sex line in bee-keeping, but let it rest on the adaptability of either of them, whether they are capable of keeping bees. I contend that women have just as much right to keep bees, or to follow any other honorable pursuit, for that matter, as have men. Some of our most famous cooks in the land to-day are men, and worst of all is, they wear the "blue ribbon," so I claim that we have the right to cross the line, as the men invaded our territory first. I do not think it any compliment to woman to ask her if she could keep bees, as it casts a reflection upon her mental as well as her physical ability.

I think that a woman has a perfect right to try any pursuit that men are capable of running, until she diligently tries and fails. When we undertake bee-keeping, I think we should examine ourselves, and see if we possess grit, grace and generosity, as these are the three essential points of a successful bee-keeper. But, as Josh Billings has said, "We can't tell how far a toad will jump by looking at him," so I guess we

had better try to see how far we can jump at bee-keeping.

It is alleged by some writers that women ought not to have as much pay as men, even when we perform the same labor, but whoever heard of a nice section of honey selling cheaper just because it was produced by a woman? This I will leave for the wiser ones to answer.

At about 4 o'clock it was decided that we adjourn *sine die*, and the benediction was pronounced by Rev. Dr. Marshall. A general hand-shaking then took place. Our time was short, and attendance rather small, but all present were enthusiastic, which made our short meeting very interesting.

A. H. JONES, *Sec.*

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Nov. 28.—Allegany Co., at Angelica, N. Y.
H. L. Dwight, Sec., Friendship, N. Y.

Dec. 1.—Rock River, at Morrison, Ills.
J. M. Burtch, Sec., Morrison, Ills.

Dec. 1.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec., Steel Creek, N. C.

Dec. 13, 14.—Michigan, at Lansing, Mich.
Geo. E. Hilton, Sec., Fremont, Mich.

Dec. 14, 15.—Eastern Iowa, at Maquoketa.
Frank Coverdale, Sec., Welton, Iowa.

Dec. 28, 29.—Vermont, at Burlington, Vt.
H. W. Scott, Sec., Barre. Vt.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.

Jan. 18, 19.—Colorado, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.

Jan. 12-14.—Minnesota, at Minneapolis, Minn.
A. K. Cooper, Sec., Winona, Minn.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

There is Not One Person but what can secure at least *two* new subscribers to the BEE JOURNAL, and get the splendid Premium offered on page 685. Try it.

Suggestions About the Improvement of Bee-Literature.

Query 846.—What general suggestions can you offer along the line of the improvement of current bee-literature (not bee-books), so as to make it more helpful to the beginner, as well as profitable to the more experienced reader?—Missouri.

At present I have nothing to offer.—E. FRANCE.

At present I have nothing to offer.—H. D. CUTTING.

For each one to do his share, telling every useful thing he has learned.—C. C. MILLER.

I have no suggestions to offer. I think our present periodical about as good as it can now be made.—M. MAHIN.

I cannot suggest any improvement in matter or management of our leading bee-periodicals.—EUGENE SECOR.

The death of one-half of the bee-papers, and more careful editing and writing for the remainder.—R. L. TAYLOR.

Plainness, greater fulness of detail—in fact, make your writings a sort of "A B C" of bee-culture.—MRS. L. HARRISON.

I think our leading bee-papers are well edited, with material fitted for bee-keepers "in all stages."—MRS. J. N. HEATER.

Special departments in the bee-papers, giving explicit weekly (or monthly) directions for the care of their bees.—W. M. BARNUM.

Root out all superfluous and worthless bee-literature, and teach the rising generation to eat honey, and be happy.—J. M. HAMBAUGH.

Experienced bee-keepers, and also beginners, should not encourage the starting of more new bee-papers, but by

giving better support to the old and deserving papers we now have, they will thereby serve their best interests. Good bee-papers, as well as good newspapers, need a long subscription list.—G. L. TINKER.

After the style of the early volumes of the old AMERICAN BEE JOURNAL, the *Bee-Keepers' Magazine*, the *Bee World* (Moon's), etc., before the "dashing writers" were born.—J. P. H. BROWN.

I think the various bee-periodicals are doing the very best that can be done. The trouble is, that what is interesting and helpful to the beginner, is "dry stuff" to the experienced.—C. H. DIBBERN.

So many *can* be offered, that space could not be given for them. It strikes me, though, that the bee-literature of the day is doing pretty well as it is; I mean the articles coming from practical workers.—J. E. POND.

It seems to me that there is not much room for suggestion. It seems to me that our leading bee-periodicals are away at the top. They are even now ahead of the average reader. I know of no literature less open to criticism.—A. J. COOK.

It appears to me that all has been, and is being, done in bee-literature that can be done to help along the line you mention. The *beginner* is most likely to be overlooked in our bee-periodicals. Most writers would hesitate to go back and minutely describe.—G. W. DEMAREE.

First, most, and all the time, wipe out the perpetual curse of filling our bee-papers with the writings of apicultural literarians, and replace it with honest reports and opinions from honey-producers who make bee-keeping pay. Dollars and cents are conservative, and when you win them at bee-keeping, I have faith in your skill.—JAMES HEDDON.

Now, there's a nice, large question for you. In general terms, to be "helpful to the beginner," it must teach him how to keep bees. To be "profitable to the more experienced," it must teach him better and cheaper methods of producing honey and performing the necessary work of bee-keeping. In both cases, it looks to me as if practical information is what is called for.—JAMES A. GREEN.

Mr. Missouri, you have got me this time, and I guess this will puzzle the most of us, as we would all love to learn, and as we do not know nearly all of bee-culture yet, and may be never will. But I think we should take up plain, practical ideas, that we use every day in our apiaries, especially those that prove most successful, and by this means we can possibly interest each other, and beginners, too. Why, when I meet a good bee-keeper at a convention, or at his home, I will just oppose some of his ideas, even if I know I am wrong, just to get something good from him. He will talk then.—MRS. JENNIE ATCHLEY.

Every beginner should have at least one, or two, of our best bee-books, and so thoroughly and carefully read it that they are perfectly familiar with the contents thereof. Having done this, any of our best bee-papers will be "more helpful" than they were before. No beginner has any right to ask that a paper be published in his interest, when he is unwilling to buy a book which is especially adapted to his requirements. It would be much like requiring a newspaper to teach him what he should learn in his primer.—G. M. DOOLITTLE.

Report of the N. E. Ohio, N. Pa. and W. N. Y. Convention.

BY GEORGE SPITLER.

The Northeastern Ohio and Northern Pennsylvania and Western New York Bee-Keepers' Association met in the Eureka Mineral Springs Hotel parlors at Saegerstown, Pa., on Oct. 19th, for a two days' session. In the absence of President M. E. Mason, of Andover, O., the Secretary called the meeting to order. C. H. Coon, of New Lyme, O., was chosen President, *pro tem.*

The calling of the roll showed but a few of the old members present. The Secretary's and Treasurer's reports showed the financial part of the Association on a sound basis.

The committee appointed in the interest of an exhibit, at the Columbian Exposition, of the products of the apiary,

reported that nothing had been done. Among the reasons given were the limited amount of space at the disposal of exhibitors, and also the expense. The committee reported that the Ohio State Bee-Keepers' Association was going to make an extensive exhibit, and any members of this Association could join with them, or if they saw fit, could make individual exhibits. The programme was then taken up.

How to Advance the Pursuit.

The first topic was, "How to Advance the Best Interest of Our Pursuit."

L. D. Freeman urged the importance of more interest and enthusiasm in the business. He said that for 40 years he had been a bee-keeper, and in all that time he found no year so poor as was 1891. The past season he had a fair yield of honey. He urged the importance of farmers becoming bee-keepers, for the reason that without bees and other insects to distribute the pollen of fruit-blossoms from flower to flower, little fruit would be produced, no matter how well trees were cared for. If farmers were to give proper attention to the business, much sweet that is now wasted could be utilized and made to yield pleasure as well as profit.

Swarming and Self-Swarmers.

The question of swarming was discussed in all its details, but no new facts were elicited. What are known as "self-swarmers" and "self-swarming hives" were touched on, but no one present had experience enough to warrant recommending them.

Uniting Colonies of Bees.

On the question of "uniting and doubling up," nothing new was brought out. It was generally agreed that uniting weak colonies in the spring did not pay. Rather let the weak ones build up, and take brood from such to strengthen those that are not quite strong enough to get into the sections with a vim at the commencement of white clover bloom. It was thought bad policy to take brood from the *strong* colonies to build up weak ones, as one strong colony is worth more than two medium ones.

Introducing Queens.

This subject occupied some time, but no new facts were developed. In case a *valuable* queen is to be introduced, it was recommended that a nucleus be formed by taking several frames of sealed brood, much of it just ready to emerge from the cells, and *young* bees, just from the cell, and introduce the queen by placing her on top or between the combs. The result will be a safe introduction. With care, it was thought that any of the methods given in standard works on bee-keeping will prove successful.

Owing to the political meeting and torchlight procession in town, bee-keepers "swarmed out," and no session was held Wednesday evening.

How to Secure Comb Honey.

On Thursday morning the first topic discussed was, "The Best Method of Securing Comb Honey."

C. H. Coon discussed it at length, and answered questions that covered a large part of the different operations in the management of the apiary. The person who is a successful comb honey producer must commence the previous fall. Have strong colonies with plenty of stores. Also be sure to have a young, prolific queen. In reply to "How is a person to know he has a good queen?" he said, judge her by what she has done. In the spring build up your colonies as quickly as possible, which will be helped greatly by what is called stimulating—feeding a little each day. Have only clean, nice sections. He does not recommend the use of sections used the previous year unless very clean and bright, with very white comb. Put sections on just as soon as bees begin to whiten the top of the frames with new comb. Take off the honey as soon as it is nicely finished, and put it in a dry, airy place.

Exception was taken to Mr. Coon's method of spring management. It was thought best to know the condition of colonies before May or June, for best results. Should a colony be queenless, a queen should be given to it; also, they might need feeding, which, if attended to, might save valuable colonies.

Next Place of Meeting and Officers.

Union City, Pa., was chosen for the next place of meeting, in October or November, 1893, the exact date to be fixed by the officers.

The following officers were elected for the ensuing year: President, E. S. Crooker, Union City, Pa.; Vice-President, C. S. Pizer, Franklin, Pa.; Treasurer, L. D. Freeman, Blystone, Pa.; Secretary, Geo. Spitler, Mosiertown, Pa.

GEO. SPITLER, *Sec.*

Don't Fail to read all of page 685.

The Adulteration of Honey—Shall it be Stopped?

Written for the American Bee Journal
BY THOMAS G. NEWMAN.

After carefully reading the article by Prof. A. J. Cook, on page 663 of the BEE JOURNAL for this week, I would like to say that I fully agree with him as to the *crime* committed by those who adulterate honey and sell it as genuine. And since the price of glucose has kept pace with the price of honey in its downward course, the villainous practices of adulterators have increased considerably. It is therefore a *necessity* to use every practical method to crush the viper which is seeking to destroy our honorable pursuit.

Prof. Cook has made an excellent suggestion about the enactment of a United States law against adulteration. The Hon. R. L. Taylor is just the person to frame such a law, and I feel sure that he will do it. Then, at the Capital we have influential friends, who can aid us. A wonderful amount of assistance can be given to such a measure by Assistant Secretary Willits, of the Department of Agriculture (formerly President of the Michigan Agricultural College); Dr. C. V. Riley, Chief of the Division of Entomology, and Mr. Frank Benton, the Apiarist of the Department of Agriculture, as well as several others I might name, who are located at head-quarters.

But there should be no attempt to conceal the fact that it will take money to have some one go to Washington and press the passage of such an Act of Congress. Are bee-keepers willing to put their hands down into their pockets and furnish the "sinews of war" for this purpose? If so, it can be done! To accompish it, three things are necessary, and without these it will be totally useless to make any move in that direction, and these are:

First, a determination to succeed. There must be no half-hearted, "milk-and-water" fighting—no dilatory tactics, nor foolish sensitiveness. We must go in for "war to the knife," and as the old and somewhat inelegant maxim very forcibly expresses it—"fight the Devil with fire." Unless an enthusiasm can be worked up which will begin and end with a fearless determination to crush out the viper—do not think of doing anything at all! Just lie still and let the monster of iniquity triumph! Let it mount the pursuit like a dung-hill, and lustily "crow" over the cowards who dare not defend their chosen vocation!

Secondly, money must be available. Without it, determination is but bluster, and indignation is only a mockery! If 5,000 bee-keepers will rise in their might and majesty, and each present a dollar to prosecute this work, then success is possible. If only 500 are brave enough to do so, out of the 300,000 bee-keepers of America, and 299,500 lag behind like cowards—then drop the matter right here, and submit to the degredation and ruination which must result to the apicultural profession!

Thirdly, above all, a vigorous, pushing leader is indispensable. He should be young, full of enthusiasm, and possess the magnetism which will draw the forces after him. Of course he must be cautious, and always on the alert—able to meet the deceptive tactics of the opposition, and check-mate all the moves of the enemy. With such a leader, marshalling on the forces, 5,000 strong, with money for full equipment, there is no telling what might not be done.

Now, what will apiarists in general say to this? Reader, are you ready for the fray? If so, let us hear from you at once. There is no time to be lost, if the work is to be done at the next session of Congress.

I would thank Prof. Cook for his words of approbation for the gratuitous work I have successfully done as General Manager of the National Bee-Keepers' Union. Evidently the Union intends to take no steps for a change, so as to take up this work as suggested some time since—for not even one response to that appeal has been heard. I suggested a way to accomplish the work, but no action has been taken so far as I have heard. Perhaps that settles the matter in that direction.

As the Professor suggests that I take the management of the prosecutions of adulterators, let me add that though I am much improved in health since last spring, still I have not the energy one

should have to do this work. Had this matter developed 20 years ago (when I was 40, and in my prime) I might have been induced to take it in hand, but now I feel that my days of usefulness are nearly at an end; and while "old men" are essential for counsel, it takes the younger men to fight. I am willing to do what I can to further the object sought, but desire to be excused from taking the management of such an important undertaking.

Chicago, Ills., Nov. 17, 1892.

Bees and Honey in Bee-Trees—Italians vs. Native Bees.

Written for the American Bee Journal

BY C. J. ROBINSON.

Referring to "Query" No. 841, I beg leave to mention, in answer thereto, that every disciple of Blackstone (the expounder of the common law) is cognizant of the plain principle of law involved in the question. "If I buy a woodland," all of the natural growth—trees included—upon the land is a part and parcel of the freehold which grantors of land convey by deed in all States. Hence, trees in which bees have deposited honey are included in the title of the grantee as a part of the purchase; so also the honey is a product of the land where deposited by the bees, and though the honey is not a part of the freehold, it is personal property belonging to the owner of the land, the same as any product of farm lands.

In case A "finds a bee-tree" on B's land, the discovery does not acquire title to the tree or the honey, in a legal sense, no more so than the discovery of any other tree, or ore of any kind. The common law does not recognize *property* in creatures naturally wild; so, whoever discovers a colony acquires a title to them against any who have not taken formal possession of the colony—only the bees.

Concerning "trespassing," each State enacts laws setting forth what constitutes trespass, and the common law provides a remedy for trespass upon real property.

ITALIAN AND NATIVE BEES.

I have just perused Hon. Eugene Secor's article on page 531. I will not attempt criticism, but I will ask of any real, expert bee-keeper, whether or not himself or others are able to demonstrate as a fact that "the Italian bees," as a variety of *Apis mellifica*, are superior in any point, or points, when compared with the native variety of this country? I mean the taking into consideration the production of marketable honey during a series of years.

I have experimented during more than half a century, was concerned in the first successful importation of Italian bees, have had queens from many breeders of Italian queens, and compared the behavior and the products of the two varieties named, and still I ask the foregoing question.

I am well aware that a considerable difference is noticeable in colonies of both races. The first importation direct from Italy came from the region of Lake Como. Most of the importations are from Milan—not much above the level of the sea. Climate has something to do with bees as domestics and their appearance. The climate of the middle and northern States compares nearer to that of the Alps region than that of Milan; hence, bees inured to the Alps climate, it may be inferred, are better adapted to our cold climate than bees bred in a climate like that of Milan.

Richford, N. Y.

Clipping the Wings of Queens—Is it Advisable?

Written for the American Bee Journal

BY "MALTA."

The article by Mr. Eugene Secor, on page 112 of the BEE JOURNAL for July 21st, having brought up the question of clipping queens' wings, I would like more information on the subject on two points.

1st. Is it advisable as regards economy of labor and anxiety on the part of the bee-keeper?

No doubt clipping will prevent the queen flying with the swarm, and she will fall to the ground close to the hive, and so be easily captured and treated as most convenient; but what of the swarm? Is it not so scattered, and consequently so reduced in numbers, as to be almost useless when gathered and hived? Do not a large number of the bees very reluctantly return to the parent hive with the idea in their heads, or instincts, that the attempt to carry out the natural laws of increase has failed? and will not instinct cause them to "after-swarm" or "cast" at the first opportunity? while if the re-clipped

queen be returned, and the queen-cells all destroyed, they are almost certain to swarm again, and perhaps at a bad time.

2nd. Is clipping not likely, if persistently carried out throughout an apiary, to result in a race of deformed bees (as regards wings) in the future? for both in the animal and vegetable kingdoms malformation, however caused originally, may become hereditary; and so much is this recognized that anything of the sort is, if objectionable, carefully avoided, or if ornamental or useful, as carefully fostered and made much of by rearers of stock, or by gardeners in selecting the animals or plants to breed from.

I do not see why bees should be an exception, and fear that if carried too far this practice may have an evil result.

There certainly remains the safeguard that even if the young queen has a tendency to deformity, she will in all probability mate with a perfect drone, for any other would surely be out-paced in flight, and so lose the opportunity; but on the other hand, the drone being the "son of his mother," and fatherless, he will inherit to the full any infirmity, and consequently, if *all* drones in an apiary are the offspring of wing-clipped mothers, themselves the daughters of clipped queens, and descended from a succession of the same, the chances are greatly in favor of an hereditary tendency to deformity.

For these reasons I deem it undesirable, and think that the strict followers of the practice are treading on dangerous ground; but I should much like to have the opinion of its advocates in this connection.

Panama.

Cellar vs. Out-Door Wintering—Fire or No Fire in Cellars.

Written for the American Bee Journal

BY DR. C. C. MILLER.

Last winter I left 12 colonies of bees out-doors all winter. I'll not leave the same 12 out this winter. Couldn't if I wanted to, for just 12 of them died before the winter was over. I wasn't altogether to blame for it, because they were left out with the expectation of being provided with protection that I was disappointed in getting. But when I found I was disappointed it was well started into the winter, and as it didn't seem severe, I thought I'd risk leaving them without protection of any kind, and see how they would come out. I saw.

I feel a good deal like saying I'll not fuss any again with out-door wintering; and still I can't get rid of the feeling that I'd like to succeed in it. I have done so, to a degree, by using proper protection, but on the whole I have done best by wintering bees in the cellar. The reason that I'd like to winter bees out-doors is, that I have just a little notion that when bees winter out in the pure air, they are in a little better condition to commence work in the spring. Still, if they have good air in the cellar, I don't see why they ought not to do just as well there. But just there is the rub. Have they as good air in the cellar?

I did something more. It seemed a mild winter, and I thought I would see if bees could not get along without fire in the cellar. They did get along, but it was a pretty bad sort of a "get along." I cannot say how many colonies I lost by it, for the spring and early summer were so bad that they kept dying off for a long time after they were out of the cellar; but I know that an unusually large number died in the cellar, and, moreover, I think that some of those that succumbed after coming out might have pulled through if they had not been weakened by the bad effects of their bad wintering.

Now one lesson that I ought to learn (and it is a lesson that others may learn as well) is, that it is not a good thing to try experiments on too large a scale. I ought to have been satisfied with killing 6 colonies instead of the 12 left out without protection. I ought to have been satisfied to leave one cellar without fire, instead of both.

Then another lesson is, that it is a good plan to "let well enough alone." I have been quite successful in wintering bees in the cellar with fire, and perhaps I ought not to yield to a hankering after something different. I hardly expect to hold right to exactly the same kind of wintering all the rest of my life, for I know myself too well not to expect some new bit of foolishness, dear knows in what direction, but I think I'll at least try.

It's a good rule to follow somewhat in the light of your past experience, at least so far as that experience is a successful one. If a friend should ask my advice as to how he should winter his bees, I should first ask how he *had* wintered them, and if he had been reasonably successful, I should advise him to make no change. If he had a climate

and locality like mine, alike in all respects, and had a cellar just like mine, had wintered bees always out-doors with an average loss of 6 per cent., while I had wintered mine in the cellar with a loss of 5 per cent., I should say to him, "Stick to your out-door wintering. You know that, and you don't know cellar wintering. True, you lose one colony in a hundred more than I, but if you try my plan you may lose ten more than I, and if I should try your plan I might lose 20 more than you." There's a great deal in being used to a thing.

Latitude is not a thing to be depended upon too much. I am in latitude 42° north. The same latitude on the Atlantic coast is very much milder. I think the winters north of me, in Wisconsin, are not so severe on bees. Perhaps one reason may be the greater sweep of wind here. Possibly less snow.

As to fires in cellars: Some object seriously to anything of the kind. "It isn't natural. Who ever heard of bees in a state of nature having fires?" True enough. Then comes the objection, "I know that fires are bad, for I tried it one winter, and that's the only winter I lost heavily in the cellar." But, my friend, while I am willing to say that your experience may be a safe guide for you, it may not be so for everybody else. My experience has been just the reverse, and perhaps it is the wise thing to conclude that in your case fires are bad, and in mine good.

"But fires are artificial, and every one has noticed that people who are kept in the house beside the fire all the time are not so rugged as those who spend their lives mostly out-doors. Will not the same rule hold with bees?" In reply I may say that people are not bees, but admitting that they are the same, and admitting that all you say is true, I'm not sure that it proves that my cellar is better without fire. I grant you that as a rule the air is not so good where there is a fire, and that people as well as bees are better in the open air; but it does not follow that in all cases it is the fire that does the mischief. The man who sits all day long in his counting-room with a comfortable fire on a December day, is not so healthy as the man out in the snow hauling wood; but would the man in the counting-room be any better off without the fire?

I think there was never so much mold and bad air in my cellar as last winter. A fire kindled there would have changed the air and if the air had been kept pure there would have been no mold. I have no quarrel with you because you do not need fire in your cellar. If you can keep it warm enough without, by all means keep the fire out, but even if you must believe that fire does harm, if the cellar cannot be kept warm enough without it, I insist that the fire will not do as much harm as a depressingly low temperature.

Marengo, Ills.

Feeders for Feeding Bees their Winter Stores.

Written for the American Bee Journal

BY C. A. BUNCH.

After trying several bee-feeders to feed up for winter stores, I have come to the conclusion that no perfect bee-feeder will ever be constructed where the bees have to climb up the sides of the feeder, then down to the food of syrup. My reasons are these:

Some colonies refuse to, and cannot, be coaxed to go up into a pan or wooden butter-dish to get their food, which is quite aggravating when winter is coming on; but so far the pepper-box feeder, or a two-quart Mason fruit-can of syrup with the lid perforated (this to be inverted right over the colony to be fed), has the desired effect. A better feeder is made as follows:

Get a tin-smith to make a square tin-box about four or five inches deep, and as large as the top of the hive; the top and bottom of the tin-box should be soldered on tight. Now make a lot of perforations on one side of the feeder; next solder on a flange all the way around on the outside, this to be ¾ of an inch high to make a bee-space. The feeder is now finished.

To fill with syrup, place the top side down, the flange or side-boards will keep the syrup from running down the sides. It can now be quickly inverted over a pan to catch some syrup that will run out. Now place it over the colony to be fed, and the bees will do the rest. Of course we all know that the idea is old, but the feeder is the best that I know of. By the way, who will make these feeders and keep them for sale?

Now that the majority of bee-keepers who produce comb honey use the eight-frame hives, which are too small to hold honey enough to last over until white clover, I think that entrance feeders would come into good play, to be made with a snout or trough to be pushed in at the entrance right under the cluster

The object in this is to feed without disturbing the bees, through letting out the warm air by removing their winter packing. As I have had experience enough at opening up colonies of bees in early spring to feed, I consider it up-hill business—business that is not pleasant or profitable.

Nye, Ind., Nov. 1, 1892.

Experience with Different Bees, Hives, Etc.

Written for the American Bee Journal

BY W. M. SCRUGGS.

I have given my entire attention to the apiary this season, and have learned a great deal, though I think there is still more to learn. I have several kinds of bees. The black bees, I will have to confess, are good honey-gatherers, though I like the five-banded Italians better, because they are gentler, and keep the moths out better than the blacks do. As for the amount of honey, I have found little or no difference.

I have the dark or steel-colored Carniolan bees, which I believe to be the best. They are gentler and easier to handle than the Italians; they are some larger, and very hardy.

I have a variety of hives for experimenting, and find the shallow hive the best for comb or section honey. The bottom story should be wide enough to take frames 21¼ inches long by 6 inches deep. They should be long enough to use 18 frames when full, and the hive should have a division-board so as to give room just as the bees need it. This style of hive will admit a case with 90 one-pound sections. It will surprise you to see how quick the bees will fill the sections in this style of hive.

I have some hives with tin-plate large enough to cover the entire bottom-board, and nailed on the bottom of the hive before the wood bottom is put on. I call this hive "moth-proof," as I have not seen any sign of moth about them, and the bees keep the bottom so clean and nice. A great deal of pains should be taken to make a hive air-tight—all except the entrance, and this should be at one end of the hive at the bottom. This enables the bee to carry out any matter without climbing up to get out with a heavy load. A hive ought to be placed in a shade from 9 to 3 o'clock in the daytime, and in a clean place, and salt should be sprinkled around the hives.

If our farmers, who have girls, and think they are expensive, will only spend a few dollars for bees and good bee books and papers, and turn them over to the care of the girls as their own property, those farmers will find their store account much less, and a dish of nice honey on the table. Besides, the girls will have money to spare in a few years.

I am pleased to read the writings from Mrs. Jennie Atchley and other women who have been writing for the AMERICAN BEE JOURNAL. I am glad to see our sisters taking an interest in a business that pays so well as does bee-keeping.

This, being in the Cumberland Mountain region, is a fine place for bees. It is healthy, and land is cheap here.

Tracy City, Tenn.

The Development of Apiculture in Colorado.

BY H. KNIGHT.

The honey-bee is not a native of America. The first were brought here and landed in Boston in 1670. Since that time the little honey-gatherer has traveled either by natural swarming, or some enterprising bee-keeper has taken them, hive and all, into every State and Territory in the Union.

The first brought to Colorado was in 1862, by Isaac McBroom, of Fort Logan, who hauled one colony across the plains by ox-team. They did not increase any, but after one season died. In 1866, ex-Gov. A. C. Hunt brought a colony to Denver by wagon. These also died without increase, the second winter. Shortly after the railroad reached Denver, in 1870, a carload of bees were brought here and sold to several that wanted to buy, at $25 per colony. From these the industry grew.

The object of bringing them to America, and later to Colorado, was two-fold. First, because of their healthful and delicious product, and second, the great benefits derived from their work in the fertilization of blossoms. The great naturalist, Darwin, truly says: "The more bees, the more flowers; the more flowers, the more seeds; the more seeds, the more flowers; the more flowers, the more seeds." If all the bees were taken out of the country, less seed would be raised, and less fruit grown, because the honey-bees are the principal agents by which the pollen is carried from one flower to another, and thus the bloom is fertilized and becomes seed-bearing.

Before the introduction of alfalfa into Colorado, wild flowers furnished a scanty supply of nectar, and the bees were often short of stores for winter, and spring would bloom forth to find but few bees to kiss her flowers, they having died of starvation.

With alfalfa came the red, white, Alsike, and sweet clovers, until now, thousands upon thousands of acres of alfalfa, thousands of acres of red clover, and miles of ditches and streams are lined with sweet clover, and many pastures and fields of white and Alsike are to be found.

Of the indigenous plants, cleome (Rocky Mountain bee-plant, skunk weed) is the best, and it has increased rapidly since the advent of civilization, so that to-day the honey-flow is considerably prolonged in regions where it abounds.

With these changes in the flora, the progress of the bee-keepers changed also. When wild flowers were the only dependence for honey, the apiarist asked for a wet season, as it was the best for honey. Now he prays, if he has time, "Please give us a dry season with an abundance of irrigating water, and keep foul brood out of my apiary." Another season he will add, "And please kill all the grasshoppers."

Twelve years ago (1880) J. L. Peabody, E. Milleson, and Mrs. Olive Wright, met in Denver and formed the Colorado State Bee-Keepers' Association. There was then but few bee-keepers, and about 250 colonies of bees in the State. Nine years ago the coming winter, the writer had the pleasure of attending a meeting of the association held in the County Commissioner's room. About ten persons were in attendance. In December, 1888, the association was incorporated under the laws of the State.

In 1890 the apiculturists of the western slope met in Montrose, and organized the Uncompahgre Valley Bee-Keepers' Association, with J. T. Hartop as President.

In 1891 two associations were born. First, the Northern Colorado Bee-Keepers' Association, at Longmont, with R. F. Coffin as President, and D. L. Tracy Secretary. This association now has 73 members. In September of the same year the Weld County Bee-Keepers' Association was organized at Greeley, with D. S. Beal President, and H. E. English Secretary. This association numbers 60 members.

All of the above associations are in a thriving condition, and ere another year rolls around as many more will be formed.

To get at the number of colonies in Colorado is a difficult problem, but after getting statistics from assessors and county inspectors, and from correspondence with bee-keepers, the number can safely be put at 64,000 colonies. Boulder county leads them all with 18,000. Of these bees it can be said that fully four-fifths are in movable-frame hives. One-fourth are owned by specialists, and another fourth by semi-specialists, and one-half are in the hands of farmers that only about half take care of them. The last named get only comb honey, and average from nothing to 30 pounds per colony, and save about one-tenth of the increase. Those making a specialty of the business get from 50 to 150 pounds of section honey, or 75 to 200 pounds of extracted, in the average season.

Placing the honey-production at 60 pounds per colony with the specialist, 30 pounds with the semi-specialist, and 10 pounds by the farmer bee-keeper, which, I think, a fair estimate, would make a honey crop of 1,760,000 pounds; the average price of which has been about 11 cents per pound, making the honey crop worth $193,600 per year, 1892 not taken into consideration, as there is not one-fourth of a crop.

The amount of wax saved by bee-keepers is very small, as so many of them throw all scraps away; but, nevertheless, about 1,500 pounds is put on the market each year in this State, the price of which is 25 cents, or $375 on the yearly crop. This amount could be greatly increased by the saving of all scrapings and scraps of wax.

The amount of cash represented in the business each year is about $561,975. This does not include wages paid to hired help, which is considerable, as many bee-keepers have so many bees that it becomes necessary to have assistants.—*Read at Colorado Convention.*

Littleton, Colo.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 711, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present

Have You Read page 685 yet

Cheap Honey in California.

If there is any cheap honey offered on this coast this year it ought to be inspected to see if it has not been adulterated. There is but little honey on hand, either of extracted or comb. There are parties in San Francisco who boast that the honey crop is not short this year, and that they have handled 12 carloads themselves this season. To them this may seem a large crop of honey, but it proves nothing, for in an extra good year two apiaries in this Southern California could fill such an order and then have some stock on hand. The truth is there has not been a full yield anywhere in this locality, while in many sections there has not been a pound of honey produced, and in others the bees have been fed to keep them from starving. Cheap honey on this coast means adulterated honey, and our statutes ought to be enforced to prevent its sale and punish the adulterator.—C. N. Wilson, in *Rural Californian.*

Extracting Beeswax.

I will give my way of making wax, though it may not be the best way, but it does very well for the small amount I have. I never melt good comb, unless the moths get ahead of me and compel it. It is usually scrapings from the bottom of boxes, hives and break-joint honey-boards, which seem to be of no value at all, but if properly treated it will produce nice, light-colored wax.

Put the material from which the wax s to be made into a metal sieve, and place this over a pan of water, and then set in a moderately warm oven. It needs to be watched very carefully, or it will run over. I have often resolved never to melt wax on the kitchen-stove while busy with other cares, for if I do, I am sure to be sorry for it. It will be forgotten, and only called to remembrance by a stream of yellow wax running from the oven. I have a honey-house with a cook-stove in it, and when I go out there to work, my mind is upon honey and wax, and I seldom forget it. I have several pans of the same size, and after nearly all of the wax has run through the sieve, I change it to another pan, in this way making sure that it will be saved.

If boiling water is used when first put in, it is apt to run over before the wax is melted; therefore it is better to start with cold water. After the wax has cooled in the pans, I remove it and scrape out the pollen and propolis, so as to be ready to place the sieve over it again. This *debris* I often scrape into a paper, to use in kindling a fire. These cakes of wax I remelt in a pan placed over a kettle of boiling water. Melt out the ends of a fruit-can and tie cheese-cloth over it, and set it in a basin, pour the melted wax through it; stop if there are any dregs. I keep a half dozen quart basins, so as to have the cakes all of one size, and when a melted basin of wax has settled, before it begins to congeal, pour it into another, leaving the dregs.

As we produce comb honey almost exclusively, there is little but the scrapings to melt, and the yield is only 10 or 12 pounds yearly. I have succeeded better in this way, and the product has been more satisfactory than when I put the contents into a bag and boiled it in a kettle of water with stones on top to keep it down.—Mrs. L. Harrison, in *Orange Judd Farmer.*

Corn-Cobs as an Absorbent.

After experimenting with various substances, the well-known absorbent power of corn-cobs induced me to try them, using them whole, and filling the interstices with dry, fine sawdust, which answered very well. Afterward I had them ground at a feed-mill, and filled the boxes three inches with this meal and I want nothing else. Cobs chopped and mixed with dry sawdust do well. This is practically a non-conductor of heat, and it is dense and porous, and has the capillary force—like blotting-paper—to carry moisture to the outer atmosphere. To illustrate the capillary force, suppose we build a new hive from lumber sawed transversely four inches thick—sides, ends and cover joints hermetically sealed. This would certainly be a warm hive, and, with the capillaries or pores of the lumber directed from within outward, you would never find a drop of water condensed on

the inside as long as the temperature within was above freezing, and the surface free from propolis. Bees in their natural homes have the benefit of this capillary force.—*Gleanings.*

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We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given n the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

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AMERICAN BEE JOURNAL

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The Date on the wrapper-label of this paper indicates the *end* of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription up to the *end* of December, 1893:

Wallace Porter Dec93
Suffield, Portage co, Ohio

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, November 19th, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c,, according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Good demand for fancy white comb, 18@19c.; No. 2, 15@16c.; No. 3, 13@14c. Buckwheat, 12@13c. Fancy white extracted, 9c.; amber, 7½@8c.: dark, 7c.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand is good for honey, with scant supply of all kinds. Extracted brings 6@8c., and comb sells at 14@16c. for best white. Although honey is scarce, there is no demand for dark comb.
Beeswax—Demand good, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Market is a little slow, a car of California comb honey having arrived, and selling at 16@17c., and the Vermont selling slowly from 17@18c. Extracted, 8@9c.
Beeswax—27c. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—Comb is arriving freely, fancy white in good demand. Off grades and buckwheat slow selling. We quote: Fancy white 1-lbs. 15@17c.; 2-lbs. 12@14c. Fair white 1-lbs. 13@14c.; 2-lbs. 11@12c. Buckwheat 1-lbs. 10@11c.; 2-lbs. 9c. Extracted, clover and basswood, 8@8½c.; Southern, 70@75c. per gallon.
Beeswax—Dull at 25@27c. H. B. & S.

ALBANY, N. Y.—Honey market some quieter and prices some easier. White clover, 15@17c.: mixed, 14@15c.; dark, 10@11c. Extracted, white, 8@8½c.; mixed, 7@7½c.; dark 7c. Stocks light of both comb and extracted.
Beeswax, 27@28c. H. R. W.

Great Premium on page 685 !

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

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R. A. BURNETT, 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

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—have you asked *him* or *her* to subscribe for the BEE JOURNAL ? Only $1.00 will pay for it regularly to *new* subscribers from now to Jan. 1, 1894 ! And, besides, *you* can have Newman's book on "Bees and Honey" as a premium, for sending us two new subscribers. Don't neglect your neighbor ! See page 685.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED.—We want a printing press, and will trade Dov. hives for same. Let us hear from you. LEVERING BROS.,
18Atf Wiota, Cass Co., Iowa.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas

FOR SALE.—6 horse-power steam rig Boiler 26x60 in., 37 2-in. flues. Kriebel Engine 5x6 cylinder, 225 rev.—worth double what I ask. Price, $130. V. W. KEENEY,
22A1t Shirland, Winnebago Co., Ills

Convention Notices.

IOWA.—The Eastern Iowa Bee-Keepers' Association will meet at Maquoketa, Iowa, in the City Hall, on Dec. 14th and 15th, 1892. All are invited. FRANK COVERDALE, Sec.
Welton, Iowa.

ILLINOIS.—The next annual meeting of the Rock River Bee-Keepers' Association will be held in Morrison, Ills., on Thursday, Dec. 1, 1892. J. M. BURTCH, Sec.
Morrison, Ills.

COLORADO.—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 18 and 19, 1893. Election of officers and other important business will come before the meeting.
Littleton, Colo. H. KNIGHT, Sec.

NEW YORK.—The next meeting of the Allegany County Bee-Keepers' Association will be held at Mrs. H. Green's, in Angelica, N. Y., at 2 p.m. on Monday, Nov. 28, 1892. All bee-keepers are invited to attend.
Friendship, N. Y. H. L. DWIGHT, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers' Association will hold its third annual session at the Court House in Charlotte, N. C., on Dec. 1, 1892. A full attendance is especially desired, and all those interested in bee-culture will have a hearty welcome.
Steel Creek, N. C. A. L. BEACH, Sec.

MINNESOTA—.The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan.12, 13 and 14, 1893. The Thursday meeting will probably be a union meeting with the Horticuitural Society which meets at the same place, commencing on Tuesday. A. K. COOPER, Sec.
Winona, Minn.

VERMONT.—The eighteenth annual meeting of the Vermont Bee-Keepers' Assocciation will be held in the city of Burlington Vt., on Dec. 28 and 29, 1892. Every one interested in apiculture is earnestly desired to be present. As a bee-keepers' association, we know no State lines, but will gladly welcome all that come. Programs will be published soon. Holiday rates on the railroads.
Barre, Vt. H. W. SCOTT, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected; President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

THE NORTH AMERICAN Bee-Keepers' Association will hold its annual Convention in Washington, D. C., near the end of this year. The exact date cannot yet be given. Mr. Frank Benton is keeping close watch, and others are watching for him, to learn when some other Society will meet in Washington, so that the North American may meet in conjunction with it and thus secure reduced railroad rates. The Secretary is at work arranging a programme, and as soon as the exact date for holding the Convention can be given, the announcement will be made.
Flint, Mich. W. Z. HUTCHINSON, Sec.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

Read our great offers on page 685.

Advertisements.

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ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., DECEMBER 1, 1892. NO. 23.

Mrs. L. C. Axtell, of Roseville, Ills., says in *Gleanings* : "In bee-culture

Let him who wishes to XL,
Or who aspires to B most Y's,
Remember this : A Y's man O's
Much of his wisdom to his I's.

And he must not his ears XQ's ;
But ears must hear and I's must C,
And he must all his senses U's
Who hopes a Y's man e'er to B."

Reduced Rates have been secured for the entire week commencing Dec. 12th, on all the railroads in Michigan going to Lansing. This will accommodate the Michigan State Bee-Keepers' Association on Dec. 13th and 14th, and also the State Grange.

The First Snow-Storm of the season reached Chicago on Friday, Nov. 25th, just after Thanksgiving Day, which was a clear, bright day here. So far as reports have been received at this office, bees are pretty generally in good condition for winter, and amply provided with excellent stores of honey. Hence, the almost universal expectation is, that they will winter nicely, and be ready to gather a large crop of honey.

The North American.—On page 655 we mentioned the matter of holding the North American Convention in Washington *during the holidays*, and requested those interested to let us know how they liked that time. The committee who have to decide upon the time of holding the convention, would like to accommodate those who expect to attend, and took this way of finding out the preferences of the bee-keepers who expect to attend. Let there now be a prompt and general response.

Dr. A. B. Mason, of Auburndale, O., wrote us as follows concerning this subject, on Nov. 21, 1892:

I haven't made up my mind yet as to what I "think of holding the next meeting of the North American Bee-Keepers' Association in Washington during the holidays." It was proposed to hold the meeting during the Grand Army Reunion, and I wrote the Secretary that I was in favor of that time, but Mr. Frank Benton came out ahead, because, as he said, there would be gatherings at Washington during the winter when we could go just as cheaply. The railroad fare from Toledo, O., to Washington for the G. A. R. Reunion and return was $11.50. Whenever Mr. Benton and the officers can find a time the fare will be as cheap, or even one-half more, it will suit *me* very well. I want to take Mrs. M. along to take care of me, and keep me out of mischief, and if the rates are too high, I'm afraid she'll stay at home and *keep me with her.* I think she wants to go, but she doesn't say so.

A. B. Mason.

We think it would be well for the officers to find out just what rates they

can secure *before* or *during* the holidays, so that they may be published. It is high time that the date of holding the convention be decided upon, if a convention is to be held *this year*. It is only one month from the date of this number of the BEE JOURNAL when we will be writing "1893." Three or four weeks is a very short time in which to notify all those who will wish to attend. The notice should be in all the bee-papers now, if anything like an average attendance is expected. Of course, the committee has done all that it could in the matter, and stands ready to accommodate the members.

LATER.—Since writing the foregoing, we have had a letter from the Secretary, Mr. Hutchinson, which says that it is now definitely decided that **Dec. 27, 28, and 29 will be the days** for holding the convention. Mr. Benton had informed this member that "he could not give any definite information n regard to meeting with some other society" in Washington.

If all who expect to attend the convention will let us know the fact, we will publish it in advance, for the benefit of others who can or cannot attend.

The programme will likely be published next week.

Two Historic Bee-Men.—The old pioneers of California apiculture are being gradually thinned out—they are being gathered to their Heavenly Father, to receive that rich and sweet reward which they undoubtedly deserve for the humane spirit they manifested to the little, toiling bee.

In an article on California bee-keeping, soon to be published in the AMERICAN BEE JOURNAL, Mr. Pryal refers to the death of Mr. C. A. Shelton, who is given the credit (and probably correctly so) of mporting the first honey-bees into California. Mr. Shelton was accidentally killed in a steamboat explosion a short time after he introduced the bees into that State. His loss was greatly regretted, for Mr. Shelton, as we learn from Mr. Pryal, was an ardent lover of Nature and Nature's God—he was one of California's pioneers in matters appertaining to modern gardening.

His grounds, near San Jose, in the early '50's, were devoted to raising prize fruits, vegetables and flowers. He had the four corners of the globe, even in those early days of the Golden State, searched for new fruits and flowers, that he might add them to his collection. He paid high prices for everything of merit in these lines which were brought to him. His paying a big price for the first colonies of bees was in keeping with the man. The enormous size of his fruits and vegetables were heralded throughout the East, and did much to induce emigration to that State. Had he lived longer, it might have been that the product of his bee-hives would have been great, and also materially added to an increase in the State's population.

In January, 1892, at his home in Contra Costa County, Calif., there died Mr. A. J. Biglow, who brought the first Italian bees to California. Mr. Pryal is working up the history of the bee-business in California, and is already in possession of many facts relating thereto. He hopes to get photographs of pioneer bee-men, and present sketches of their lives along with their portraits. Probably all of these will be given for the benefit of the readers of the AMERICAN BEE JOURNAL during the forepart of the coming year. The practical articles from practical bee-keepers that we have secured to write for these columns the ensuing year, with the historical and biographical interests well represented, will make the old AMERICAN BEE JOURNAL wonderfully interesting and profitable from now on.

A Dark Blue Wax, which is more poisonous than arsenic, is said to be produced by a species of bee in the southern part of South America and the islands adjacent.

It May be Honey-Dew.—Mr. Robert H. Williams, of Beatrice, Nebr., on Nov. 14, 1892, sent us a sample of honey, and also wrote us the following letter:

I send you to-day a sample of honey, or what claims to be honey, bought of a grocer in Crab Orchard, Johnson Co., Nebr., for pure honey. Please refer it to some one for analysis, and let me know the result. This honey was sold at retail for $1.20 a gallon, and as soon as I saw it at a neighbor's house, I asked for a sample to send to you.

Honey seems very scarce here, but my bees have plenty of good stores, and gave a little surplus.

Accept my congratulations, also, on the recent improvement in the BEE JOURNAL. ROBERT H. WILLIAMS.

Upon receipt of the sample of honey, we immediately forwarded it to Prof. A. J. Cook, of Agricultural College, Mich., who reports as follows upon it:

I have had the sample analyzed. Its high direct polarization 5440, and indirect 4432, would make it quite certain that it was adulterated with both glucose and cane sugar, were it not for the probability that it is honey-dew honey. The sharp taste, the color, and the flavor, make me believe it to be a very nice article of honey-dew honey. Adulterators do not usually put dark-colored "honey" on the market.

A. J. COOK.

The Ladies' Home Journal, of Philadelphia, Pa., is perhaps the finest monthly home magazine in the world. If ordered before Dec. 20th, 1892, we can club it with the BEE JOURNAL—both Journals for one year—for $1.60, to *either old or new subscribers.* If you are a new subscriber to both JOURNALS, you will receive ours the rest of this year *free;* and the "Ladies' Home Journal" will begin with the January number.

New York State has 10,000 bee-keepers and 50 supply dealers, says the *American Farmer.* We wonder where the correspondent got his figures.

California Bee-Keeping.—A correspondent, Mr. Harry Ellington Brooks, writing from Los Angeles, Calif., to the San Francisco *Call,* dwells at some length upon "Bees and Bee-Keeping" in the Golden State. In the following day's issue of the same paper, the editor takes occasion to remark as follows, many of his facts and figures being taken from Mr. Brook's article. The editorial referred to says:

California honey has been familiar to lovers of sweets for more than a quarter of a century, but few persons are aware of the extension which the industry has attained. Tnree years ago there were in the counties south of Tehachapi 45,000 colonies of bees, which produced 2,600 tons of honey, worth nearly $250,000. The increase since then is estimated at 50 per cent. An industry which yields $375,000 per annum, without any outlay, is worth prosecuting.

In ancient times, before the manufacture of cane sugar, the production of honey was more important than it is now, and the ancient classics abound in information concerning the bee. In those days bees were regularly moved from regions where the flowers bloomed in the spring to regions where they bloomed in the fall, and the practice is still kept up in parts of Great Britain. Here, in favored localities, flowers of one kind or another bloom all the year round, and the bee-keeper does not need to move his hives. He generally selects a ranch in the foothills of the southern counties, being careful to choose one in which the bees can find water. Our California honey used to be known as white-sage honey, though, in fact, the sage plant is unreliable, and blossoms sparingly.

The bee of southern California finds nectar in the oak, sycamore, alder, willow, manzanita, sumac, yerba santa, buckhorn, wild plum, wild buckwheat, acacia, alfalfa, eucalyptus blossom, and almost all kinds of fruits and flowers. It is really troubled with an embarrassment of riches. And though the sweetest and whitest honey is stored by bees which feed on the white sage, the flavor of the honey produced from the great variety of nectar-yielding plants which abound in six southern counties, is considered in the East more delicate than that of Eastern honey, and the goods command a higher price.

An expert, starting in with a single colony, and caring for the bees accord-

ing to the rules laid down in the books, may have 100 colonies in the end of three years. Five hundred is as many as can be handled on a single ranch. A colony has been known to yield 1,000 pounds of honey, worth 5 cents a pound, in a single season; but 200 pounds is the customary average, and in very dry seasons the colony will not yield as much as that. Something is realized by the sale of beeswax.

Our present California bee is a hybrid. The bees which were brought here in 1855 were of the Italian breed, and since then Sicilian and other breeds have been introduced. But they found a wild bee here and crossed breeds, apparently to the advantage of the insect. Efforts are now being made to introduce other varieties, especially an Indian bee, which is said to be large, and a great producer. Queen-bees from Cyprus and Northern Africa are in demand at $5 apiece and upward. We shall probably have some of them here.

Southern bee-keepers complain that the agricultural department of the University has not paid sufficient attention to the subject of bee-culture. In the University of Michigan there is a professor of bee-culture, and in Germany teachers of the industry travel through the country at the Government expense, teaching the peasantry how to keep bees and to improve the quality of the honey.

Most of the honey sent from California is shipped in 5-gallon cans, which contain each about 60 pounds of extracted honey. This is drawn off by the grocers, and sold in jars and bottles. Mr. Brooks seems to commend the practice. He is probably not aware that in the East, and especially in the central cities of St. Louis and Chicago, this liquid honey is constantly adulterated with glucose and sold as California sage honey.

If the market will not take our honey in the comb, or it will not keep in that form, it would be better for the Southern bee-keepers to put up their extracted honey in jars of their own, with their own label on them. Good honey would soon establish a reputation for itself, and consumers would insist on the product which they had tested, and with which they were familiar. Our middlemen in the wine trade have pretty nearly ruined the wine industry by shipping in wood and selling to parties who used our pure wine as the basis of an adulteration. The bee-keepers should take warning by their example. It would be easy for a large producer to have special glass jars made for him stamped with his name. If he had a good article of honey, the jars would command a steady sale.

The suggestion in the last paragraph of the foregoing is a most excellent one —that of each producer putting up his honey in jars of his own, and then label them with his own labels. This would not be a difficult matter, and besides in the end it would contribute very much to a steady demand for the honey so labeled, if such honey is first-class in every respect.

We do not see why producers should not have particular "brands" of honey, as have the manufacturers of flour and some other productions. A bee-keeper's name should always be the best guaranty, and doubtless is, except in cases where a large shipment of honey has been re-canned, or re-bottled, or subdivided in some way. An individual "trade-mark" is almost a necessity in these days of adulteration and fraudulent practices in almost every department of the commercial world.

Stray-Strawer and Stray-Strawing. — These terrible, jaw-breaking "names" applied to Dr. Miller, are causing just lots of fun now-a-days. The *Canadian Bee Journal* now comes to our rescue in one way, but in another direction it points out a typographical error made in our printing s-t-a-w-ing for *straw*ing. Here is what our Canadian brother-editor says in his paper for Nov. 15th, after quoting what Dr. Miller said in his "Stray Straws" about our having called him a "Stray-Strawer:"

He didn't do anything of the kind. We know better. He called you "the Stray-*Stawing* Doctor." But what's the odds, so long as he didn't call you too late for dinner. He might have called you the stray-sawing, or the sway-stawing, or the stay-strawing, or the sway-stawing, or the straw-swaying, or the say-strawing, or the stray-sawing. The fact is, he knew you had strayed into the pastime to stay and straw; and he got it out the best way he could; and we don't care a straw if he did.

The Michigan State Bee-Keepers' Association, as before announced, will be held in the Senate Chamber at Lansing, Mich., on Tuesday and Wednesday, Dec. 13th and 14th, 1892.

Among the subjects upon which essays will be read, are the following, for Tuesday, Dec. 13th:

"Adulteration"—H. D. Cutting, of Tecumseh, Mich.

"Shall we Feed Cane Sugar Syrup for Honey?"—W. Z. Hutchinson, of Flint, Mich.

"Experiments in Bee-Keeping"—Prof. A. J. Cook, of Agricultural College, Mich.

"Has the Bee-Escape Come to Stay?"—S. M. West, of Flint, and A. S. Boyden.

On Dec. 14th, besides various reports of officers and committees, election of officers, etc., these questions will be considered:

"Few Bees and Much Attention *vs.* Many Bees and Little Attention?"—Byron L. Walker, of Evart, Mich.

"Shall we Go Out of the Bee-Business?"—T. F. Bingham, of Abronia, Mich.

"How Can we Stimulate the Market?"—James Heddon, of Dowagiac, Mich.

"Carniolans; Have they Come to Stay?"—E. R. Root, of Medina, Ohio.

Upon the neat programme, a copy of which we received, is also printed this letter from the Secretary, Geo. E. Hilton, of Fremont, Mich.:

Kind Friends:—Being compelled to change the time to two weeks earlier than we expected, makes the time short for getting out programmes, advertising, etc., and I appeal to all who receive this programme to assist in the matter by spreading the news. Get your local papers to publish the entire programme; write up a little local yourself, and hand your editor—he will be glad to receive it; send for more programmes, if you can use them, or send me the names of those you would like to receive programmes.

And last, but not least, be sure to come yourself. Don't forget to bring your wife and daughters; if you haven't a wife, bring your best girl.

The meeting occurs at the same time of the State Grange; this always brings a large delegation of ladies; they meet in the other end of the Capitol, in Representative Hall. We expect reduced railroad rates for both societies, and an interesting and profitable time may be expected. AGAIN I SAY, COME!

GEORGE E. HILTON, *Sec.*

Bee-Culture in California.—Our friend, Mr. W. A. Pryal, of North Temescal, Calif., is about to begin the preparation of a publication of a nicely illustrated book devoted to bee-culture in the State of California. It will also contain a few additional chapters on the fruit and bee-sugar industries in that State. Mr. P. is abundantly able to get up a splendid volume on the subjects selected.

Beginning with the next number of the BEE JOURNAL, we will publish a short series of articles from Mr. Pryal, about early bee-keeping in California, and particularly concerning Mr. Harbison, once the great "bee-king" of that region. These articles will be very interesting, and doubtless will be read with much interest, as is everything that relates to the wonderful State of California.

Illinois State Convention.—The Springfield meeting of the Illinois State Bee-Keepers' Association will be held at the State House at Springfield, on Dec. 14th and 15th, 1892. Railroad rates will be granted on the certificate plan—that is, every one in purchasing his or her ticket will request a certificate with the same. The Secretary is unable, at this date, to announce what the programme will be, but hopes to have it ready in time to have it published before the meeting.

The Illinois State Swine Breeders, Short-Horn Breeders, and Sheep-Breeders' Associations will be in session the same week, at the State House, so that any one attending can avail themselves of the opportunity of attending all. Hotel rates are secured at the St. Nicholas Hotel.

Great Premium on page 717!

A Field for Study.—Rev. J. P. Riedinger, of North Ridgeville, Ohio, was among the very first of the BEE JOURNAL editor's school-teachers, and a most excellent one he was, too. A short time ago we were pleasantly surprised in receiving from him a letter expressing his congratulations and wishes for our success in the work of publishing the BEE JOURNAL. We had sent him a copy of the paper, and upon receiving it he wrote to us as follows:

My Dear Friend York:—I am in receipt of the AMERICAN BEE JOURNAL, and I suppose the publisher is my friend of what now seems long ago, so quickly has time passed. Thanks, however, for the favor, not only for its own sake, but the pleasant associations it recalls. Allow me to extend to you my congratulations and best wishes for success.

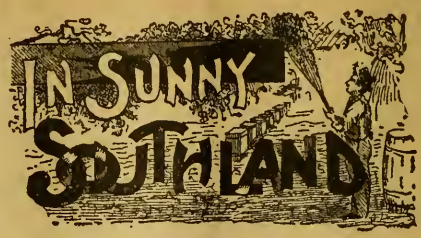
What a field for delightful study bee-keeping must be. Its field extends for miles—wherever flowers, bedewed with honey, grow. It is also a life among the busiest of lives. What lessons of industry, harmony, sagacity and regularity they teach by exemplification.

If stimulating example is of any value, the bee-keeper should be a model of praiseworthy qualities.

Yours as of old,
J. P. RIEDINGER.

Only Eight Bee-Papers now "appear with any degree of regularity" in this country, says the *American Bee-Keeper*. They are: *Gleanings in Bee-Culture*, *Bee-Keepers' Review*, *American Bee-Keeper*, *Canadian Bee Journal*, *American Apiculturist*, *Progressive Bee-Keeper*, *Bee-Keepers' Guide*, and the AMERICAN BEE JOURNAL. We hardly think there will be the usual "new crop" of bee-papers during the next few months. Somehow the past publishers of such seem to have "enjoyed" it about as much as a good many people "*enjoy* poor health." At least they seem to have gotten rid of their new projects about as rapidly as they would like to get out of the "poor health" column.

Be Sure to read offer on page 717.



CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Several Eggs in a Cell, Etc.

"What makes a good looking queen sometimes lay two or more eggs in a cell?" is asked by a bee-keeper.

First, I will state that there are several reasons why a queen lays two or more eggs in a cell, but I will only give two reasons this time, as I am in a great hurry.

The first is, when the bees are too few, and do not occupy or cover enough combs to afford her laying room. Hence, to free herself of the accumulated eggs, she lays too many in a cell.

The second is, when young queens begin to lay they (or some of them) are nervous and miss the cell they intend to lay in; that is, in their eagerness to lay they inspect a cell, and when they curve the body to lay, they miss the cell aimed at, and lay in the one next to it; this I have watched them do, and the cell may already have an egg in it, when, after they lay awhile, they become more used to the work, and make their deposits regularly.

PART DRONE AND PART WORKER EGGS.

Another question is, "What causes a young queen sometimes to lay part drone and part worker eggs all in worker-cells, then turn out to lay all right?"

Well, I will declare! The way the querist puts this question it is so long that it nearly takes my breath. In the first place, it is not always the queen that is at fault, as just about the time the queen is hatched, or a little before, there are some workers that begin to lay, then in a few days the queen begins to lay, too. And they lay on harmoniously together until the laying-workers "play out;" then, of course, the queen has full sway, and the brood soon becomes all worker. While the workers and queen are dividing space, of course

the brood was part drone and part worker.

(And right here I would like to state, while I think of it, that the reason inexperienced queen-breeders sometimes send out virgins for laying queens, is by being "fooled" by laying-workers as above. I can nearly always tell when a queen is laying, by her size and general appearance.)

Another reason is, the queen may make a mistake. You know we are taught that the laying apparatus of the queen is forked, and at the time of copulation there is a little, minute sac on one side of the forked stem filled with the fluid from the drone, and every egg she lays down that stem passes the fluid and is impregnated, and when she lays down the other stem it does not come in contact with any substance, hence is an unimpregnated egg, and produces a drone. Now the queen has the power to lay down either stem at will, as you can move your right or left hand. So she may make a mistake until she gets use to it, and lay down the wrong stem occasionally.

And last, you probably know that some writers claim that the bees have the power to change the sex of the egg; but I can't agree with those writers. And so you see in this case, the bees may make a mistake, and sometimes rear a drone when they meant to rear a worker.

Now, dear friends, I do not claim these questions to be answered completely, and may not be satisfactory, but I trust pou will let me off when I tell you that I have answered them to the best of my ability. I would like to hear from some one or more persons that are more capable of answering these questions than I am.

Bee-Keeping in Southern Kansas.

MRS. JENNIE ATCHLEY:—I am only a beginner, this being my third season. I commenced with one colony in an old-fashioned hive. I have studied Newman's, Root's and Langstroth's books on the honey-bee, besides several others, and have taken the AMERICAN BEE JOURNAL for the past year. It all reads very nice, and yet none of them exactly fit our locality (the extreme southern part of Kansas) in all respects. I know much more than when I commenced, and if I should quit keeping bees now, I would think I had been amply repaid by the many wonderful things regarding the honey-bee I have learned.

The past season here has not been nearly as favorable as last, although I have much better results than last year. I safely wintered 11 colonies of bees on permanent stands, with only the loss of one queen, which I replaced. Last year this colony only stored 2 pounds of surplus honey; this year, 72 pounds. I now have 22 colonies of thoroughbred Italians in fair condition for the winter, and nave taken 700 pounds of surplus section honey. The surplus was stored from knot-weed during the last ten days of August and the first ten days of September, and is of very good quality.

There is much said at this time about the way to winter bees. For this section I think the following is as good as any, and is my way:

Close the entrance of the hive to one inch space; take an ordinary grain-sack, or its equivalent, and fold three double, the size of the super; take the bottom slats out of the super, and place the sack on top of the frames, put the top on the hive, and that is all, except to keep the hive well shaded from the sun all winter and well into the spring.

I find the difficulty here is not in keeping the bees warm, but to keep them cold during the winter; and the same, to a great extent, holds true in the summer. My colonies, whose hives face the north, and are the best shaded, produce the best results. J. L. BOWDISH.

Oxford, Kans., Nov. 11, 1892.

Does Bee-Keeping Pay?

Yes, bee-keeping pays here in Tenneesee. Mr. S. W. Henley purchased 12 colonies of bees last April, and paid $25 for them. He sold $25 worth of honey, and saved 4 swarms.

This is the first season that I have given bee-keeping my whole attention. Early in the spring I invested $100 in bees, and began work. I gave my whole attention to the apiary for four months, and at the end of the four months I had sold $128 worth of honey, and had increased my bees to 107 strong colonies. I have replaced the $100 I invested, and have for my four months' work 107 colonies of bees in frame hives of my own make, and the $28. Now I can say from experience that bee-keeping does pay in Tennessee. W. M. SCRUGGS.

Tracy City, Tenn., Nov. 21, 1892.

Have You Read page 717 yet?

Does it Pay to Paint Hives?—If so, What Paint is Best?

Query 847.—1. In the long run, is it more economical to keep hives well painted? 2. If advisable to paint them, what kind of paint is the most durable?—J. P. W.

1. Yes. 2. Pure white lead with raw oil.—A. B. MASON.

1. Yes. 2. Pure white lead and oil.—MRS. J. N. HEATER.

1. Yes. 2. Boiled linseed oil and white lead.—J. M. HAMBAUGH.

1. Yes. 2. We use good mixed paints, or white lead.—DADANT & SON.

1. It is. 2. Pure white lead toned to suit the taste.—J. P. H. BROWN.

1. It certainly is. 2. Good white lead and linseed oil is the best I have used.—M. MAHIN.

1. Yes. 2. Two parts of French yellow ochre ground in oil, to one part of white lead ground in oil.—G. L. TINKER.

1. A part of my hives are painted, and a part not. Aside from looks, I doubt the advisability of painting hives.—G. M. DOOLITTLE.

1. Yes. 2. I have never used anything but white lead and oil, except some mixed paints which did not prove durable.—JAMES A. GREEN.

1. I think it more economical to keep them painted, but perhaps not *well* painted. I would not paint them too often. 2. I can't tell.—R. L. TAYLOR.

1. Yes, in my opinion, most decidedly. 2. I think pure lead and oil is the best; a little color can be added at fancy, but white is preferable, as a rule.—J. E. POND.

1. Possibly the best plan is to paint covers and not bodies. 2. A cheap brown paint has lasted well for me, but a lighter color may be better.—C. C. MILLER.

1. Yes, and always give them another coat when not in use. 2. There is nothing better than white lead and linseed oil. Color may be added to suit the fancy.—C. H. DIBBERN.

1. Yes, when lumber is of average price, or over. 2. The best paint at the price, is that lately described by *Gleanings*. I know by experience, with something much similar.—JAMES HEDDON.

1. Yes, paint the hives. 2. As to durability, look about your county, and see what kinds of paint are most durable. Dark paints are durable, but not always desirable for hives.—E. FRANCE.

1. It is. 2. I have often wondered at the shortsightness of bee-keepers of pretense in this direction. 2. I prefer white lead paint. Dark colors absorb too much heat in warm weather.—W. M. BARNUM.

1. I don't know. Perhaps not. I think painting is more for appearances than economy. I like to see them painted. 2. Any light colored material that would be durable on the outside of a dwelling.—EUGENE SECOR.

1. Yes, by all means. 2. First coat pure lead and oil; second coat, half lead and zinc, with oil and turpentine. The zinc prevents the lead from chalking, and with the addition of a little turpentine, makes a hard coat that will not peel nor rub off.—H. D. CUTTING.

Yes, if they are movable-frames. If simply a box-hive, perhaps not. White lead and oil (raw linseed oil) is as good as any. Of paints ready mixed for use, there are none better than Harrison Bros.' "Town and Country" ready mixed paints, New York and Philadelphia.—MRS. L. HARRISON.

1. I don't think so, but I do think it pays on the score of appearance. I don't believe it pays in dollars and cents to paint buildings, but my house and barn are well painted. 2. I think good white lead and zinc in oil, tinted to suit the taste of the owner, or better, his wife. The writer has excellent taste, but his wife is way ahead of him.—A. J. COOK.

1. Yes, sirree, it is in this country. 2. I have not yet found a better paint to stand this climate than pure lead and oil. By the way, let me tell you how to make a pretty clouded hive. Use pure white lead and boiled linseed oil. Then, after you spread on the last coat, take a carpenter's broad pencil and make wavy lines all over the hive, or any figure you

wish, right in the fresh paint, then rub the paint mostly out of the brush, and with it spread the black lines, moving the brush only one way, and see what a nice clouded hive, or imitation of marble, you will have.—MRS. JENNIE ATCHLEY.

1. I think so, decidedly. 2. Ochre mixed with boiled oil stands the weather best of all paints. I have tried white lead, and would like it best, but it is objectionable because it rubs off like whitewash when handling the hives. I once had 50 hives made from lumber directly from the saw; I kept them nicely whitewashed, and they were the cheapest lot of hives I ever had, and answered every purpose.—G. W. DEMAREE.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Dec. 1.—Rock River, at Morrison, Ills.
J. M. Burtch, Sec., Morrison, Ills.

Dec. 13, 14.—Michigan, at Lansing, Mich.
Geo. E. Hilton, Sec., Fremont, Mich.

Dec. 14, 15.—Illinois, at Springfield, Ills.
Jas. A. Stone, Sec., Bradfordton, Ills.

Dec. 14, 15.—Eastern Iowa, at Maquoketa.
Frank Coverdale, Sec., Welton, Iowa.

Dec. 27-29.—North American, at Washington.
W. Z. Hutchinson, Sec., Flint, Mich.

Dec. 28, 29.—Vermont, at Burlington, Vt.
H. W. Scott, Sec., Barre. Vt.

1893.
Jan. 13, 14.—S.W.Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.

Jan. 18, 19.—Colorado, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.

Jan. 12-14.—Minnesota, at Minneapolis, Minn.
A. K. Cooper, Sec., Winona, Minn.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

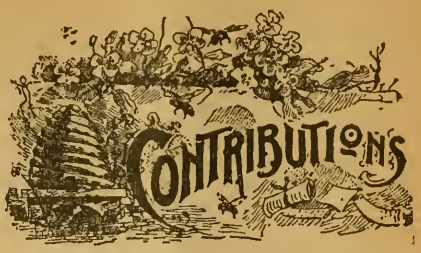
North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

Honey from Beans is reported by a California paper. It says that in the big Santa Clara Valley a bee-keeper moved his bees into his bean-fields when other sources of nectar supply were exhausted, and the result was a good crop of delicate, first-class honey.



Empty Brood-Combs—Their Most Profitable Use.

Written for the American Bee Journal
BY JAMES A. GREEN.

Sooner or later every bee-keeper is apt to find himself the possessor of a number of empty brood-combs. If he seeks information from authorities as to the best way to utilize them, he is liable to receive very contradictory advice.

Some will tell him that these combs are very valuable; "As good as money in the bank; "The sheet anchor of success," etc., while others will say that the best thing he can do with them is to melt them into wax. As usual, the truth will be found to lie somewhere between the extremes. Their value for use in the hives will depend very much upon circumstances. At times they are very valuable, and at other times they might better be thrown away than used.

The most natural and common use is to hive swarms upon them. We know that a new colony must have brood-combs before it will do much at storing honey, and nothing could be more natural than to suppose that by giving them these combs already built, they will be greatly helped and enabled thereby to commence sooner the profitable work of filling sections.

But if we experiment carefully, we will often find that what looks so plausible in theory, does not turn out so well in practice. The colonies that we had supplied with full sets of ready-built combs somehow do not give as great a surplus of honey as those which had to build their combs anew. There are several reasons for this. One is, that bees, as well as human beings, will often take more time to patch up an old thing than to make a new one. Combs usually require considerable fixing over before the queen will lay in them.

The most serious objection to their use in this way is, that the bees will begin

to fill them with honey at once, and will do little or nothing in the surplus department until the brood-combs are full of brood or honey. Very often they are filled first with honey, and unless the queen is an unusually smart one, this honey stays there, reducing the brood-rearing capacity of the hive, weakening the energy of the bees for storing in the supers, and lessening decidedly the amount of marketable honey. If there are empty combs enough, they may have just as much honey put into them as would be put into the supers—perhaps more—but this honey will not be worth nearly as much as if it had been stored in sections.

As previously stated, the value of combs depends upon circumstances. There are times when combs may be very profitably used in hiving swarms, while under other circumstances we may find that we have used them at a loss. To use them advantageously, certain rules must be followed.

In the first place, if honey is coming in freely, and this honey-flow is not likely to last more than a month, which is the case nine times out of ten, too many combs should not be given. Nothing could be more fatal to the chance of securing a large yield of comb honey, than to hive the swarm in a large hive filled with finished combs.

Ordinarily the swarm issues during the early part of the honey-flow, which does not last more than two or three weeks longer—often a shorter time. At such a time the brood-chamber should be contracted to a space equal to five Langstroth frames, and I think the fewer finished combs are used the better.

On the other hand, if swarms issue very early, before the main honey-flow begins, it will be found profitable to give them as many combs as the queen will occupy with brood before they are filled with honey.

As the honey-flow draws toward its close, it again becomes profitable to hive swarms upon finished combs, as otherwise the colony may not be able to build sufficient combs for its needs, in which case brood-rearing is restricted, and the colony rapidly dwindles. At this time, too, all colonies that have been hived in a contracted brood-chamber should be looked over, and empty combs added as fast as they can utilize them. In this way colonies weak in numbers may often be brought up to good working strength in time for the fall crop.

The time when empty combs are most valuable, is when it is desired to increase the number of colonies as rapidly as possible. With vigorous, prolific queens, plenty of empty combs, and judicious feeding when pasture is short, an apiary may be increased in numbers at a very rapid rate, and it is this very elasticity—the ability to recover quickly from heavy losses—that relieves bee-keeping of much of the uncertainty and risk that would otherwise make it a much more precarious occupation than it is.

Dayton, Ills.

The "Coming Bee" to be Obtained by Crossing.

Written for the American Bee Journal

BY PROF. C. L. STRICKLAND.

Much has been said of late about the arrival of a new race or strain of bees, naturally called the "coming bee," yet after several importations the coming bee remains in obscurity, and we are disappointed.

I am pleased to say that I believe we have at the present the best bees for all purposes that the world contains, in the Italians, Carniolans and blacks; but, gentle reader, I think that by proper crossing of those three kinds, and using their progeny judiciously, we might surprise ourselves, if not the World, by producing something. Those three races are quite distinct, and all possess natural points of excellence. Is it not possible and reasonable to believe so—that by a union of the good qualities we may produce a *fac simile?* Why not? Friends, let some one try. Time generally tells the destiny of affairs, but never before hand.

It really would be nice to produce a bee with more real qualities combined than are found in any one strain we now have. Truly, none deny that there exists a possible chance for so doing, to be done by a proper mating of pure queens and drones of those three races, and then working on the progeny. Who is able to tell the results?

We are fully aware that improvements have been made by a judicious mating, and good points held in place; but let me kindly whisper in your ear, that the poor drone *must* play a very fine part in this "game" of origin, or our chances are gone.

For example: Take a black queen—"Egyptian darkness"—mate her to a pure Italian drone; rear queens from her progeny, save the one shewing the most gold, mate again as at first; repeat

this to the fifth generation, when, presto, where are the black bee signs? This plan will work both ways.

The Italian bee is a good one, but have any improvements been made only in color, or by mismating? I think that the original qualities of any one race cannot be improved by using queens and drones continually of the same strain, but merely hold established qualities; therefore the necessity of knowing and comparing those qualities, before compounding them, for the purpose of originating a new strain.

But, alas! I fear the missing link between animal and insect will forever bar us out of the haven of complete and almost unlimited success. We are aware of the great strides in the line of speed by the horse, that has been accomplished of late years, but please allow me to say that much of this wonderful success must *justly* be accorded to the wonderful power of external influences. But I fear this wonderful agency cannot be applied to as low an order of life as the bees. Simply carry the order of improvement to the sixth generation of the bee, and what have you done with any one race? Reached the acme of perfection. Affinity has reached its level. But if this external power could, in this case, be aptly applied, who is able to tell where our success would terminate?

But honestly, dear reader, we do not need any better bees than we have at the present time. We have those that are beautiful, gentle, prolific, and very industrious, and large and strong. As rational beings, we should truly be content. Take better care of those we have, that they may give better returns.

For none will ever be found,
That will collect nectar when it does not abound,
None that will work without propolis and stains,
None that sting, without giving you pains.
None that will forever non-swarming be—
None that may suit every one—not even me.

Peabody, Kans.

Bee-Stings as a Cure for Rheumatism—Care Required.

Written for the American Bee Journal

BY P. C. GRESS, M. D.

I notice that on page 526 is given a cure for rheumatism by the sting of the honey-bee. That the *Apis mellifica* is one of our best remedies, is no longer doubted, but I fear from the substance of the article copied from the *British Bee Journal*, that people do not use the necessary precaution to be entirely safe, as it is only a matter of time until we will hear of some fatal result, which will be detrimental to our business of bee-keeping, and discouraging to a good, effective, and safe treatment for rheumatism. I feel as though it is actually resting upon me to call attention to this fact, as I was the first doctor to encourage this treatment.

After an appeal from *Gleanings*, a few years ago, when this subject was first mentioned, at which time Mr. Root asked for information, I gave my experience in two cases, which can be found in the back numbers of *Gleanings*.

As to the virtue of the direct sting, there is no further doubt in my mind that it will cure many cases of rheumatism and neuralgia, and urinary diseases; but only such cases as are subjects of kidney troubles are most readily cured, or where there is uremic acid in the blood. Cestitis, or inflammation of the bladder, are many times relieved and cured. Neuralgia is one of the human elements that readily yield to the little yellow "doctor."

I will relate the effect and result on my esteemed friend, Dr. C. A. Cremer, who, for years, suffered with facial neuralgia, which resisted all medication given by the way of the stomach, when one day while approaching one of his attacks I by accident got him stung by pursuading him to go to a hive of very fine bloods, which I first had teased for the occasion, when one of them did the work well by striking the spot most affected, which was his left eye. The pain disappeared in a few minutes, but his face and both eyes swelled shut, and he remained in his room for four days, feeling well, but unfit to be seen.

The immediate effect was sickness, profuse perspiration, and following eruption on the surface of the body. The result was no further neuralgia, although 2½ years has elapsed since the time of the sting, which was only one sting. Now suppose there had been six or eight, as many apply, there would not have been doctors enough in the universe to have kept him alive.

Another case is fresh in my mind of a man who was stung and came to my office for advice. When ascending the stairs he became sick and faint, and fell, rolling down stairs, and was unconscious for fully one-half hour.

Now these are two cases where one sting each was more than sufficient for

all purposes. Had either of them got more than one sting, the result might have been fatal.

I merely wish to impress the public with the necessity of great caution in stinging persons who are not accustomed to being stung; and I advise, first, never to allow any sting about the head, face or body until you know how the victim is affected by a bee-sting, or, in other words, first take the hand or foot of any one who has never been stung, and after awaiting the result of the first sting for one-half hour, with nothing unfavorable, then you may apply one to the part affected, be it in the knee-joint, face or body. Waiting again for the result, if unfavorable symptoms appear, stop for 24 hours, and apply as before. But in no case apply from 6 to 8 and 10 to 20 stings to any person, unless it should be some old apiarist, like Mr. Root or Dr. Miller.

Atchison, Kans.

Managing Swarms with Unclipped Queens, Etc.

Written for the American Bee Journal

BY F. H. RICHARDSON.

I see in my article on page 635 that I say I "secured 200 pounds of extracted and 55 pounds of comb honey." I meant this was my *fall* crop. Now I wish to tell how I managed swarms without clipping the queens' wings.

I am always on hand during swarming season from 7 a.m. until 7 p.m. If I see indications that a colony will swarm before night, I set a guard of queen-excluding metal over the entrance at once, but usually I proceed as follows:

I have at least five hives on bottom-boards all ready for bees. Suddenly I hear the familiar roar. I grab an Alley queen and drone trap and "make tracks" for the "seat of war." I place the trap over the entrance, pick up the hive, and set it to one side, get one of the aforesaid empty ones and put it on the old stand, and then at once I carry the old hive to a new location, and leave a board against the front of it. By this time the bees have missed their queen, and returned, of course, to the old location, and taken possession of the empty hive.

Now, if the queen has gone up into the trap, I take her out and put her in the new colony. If she has not, I open the hive and get her and a frame of unsealed brood (I get the latter anyhow), and put both in the new colony.

This has "worked like a charm" with me, and I call it my "automatic hiver." My last five swarms I hived this way. It proved one thing to me, *i. e.*, that the queen does *not* lead the bees out in swarming, as some assert.

WORK DONE BY BEES.

The item on page 624 in regard to work done by bees, I can hardly credit. During the honey-flow (being of an enquiring mind) I "massacred" a good many loaded bees and emptied their honey-sacs, and found that about three bee-loads made a fair sized drop. To prove this, I shut up some bees in a cage until their sacs were empty, and then let them out into four cages—two in one, three in another, four in another, and one in the last.

Now each of these cages contained one drop of honey, each drop being of equal size. All quickly found their drop and began business. The two bees diminished their drop very considerably; the three cleaned theirs up very nearly; the four cleaned up and "licked the paper;" while the one lonesome bee undoubtedly wished it had two more sacs. Now this proved that one drop was just about three bee-loads.

I have not yet "dropped" an ounce of honey (though I intend to), but I don't think there are over 300 drops, which would give 900 bee-loads per ounce, or 14,400 per pound; whereas the article referred to gives it 3,750,000. Of course my figures do not allow for evaporation. I very much fear those calculations on page 624 are not "founded on facts."

Moberly, Mo.

[Mr. Richardson will remember that it was stated that "it has been estimated," etc. If the estimate is wrong, of course it should be corrected. Who else has made any experiments in this matter?—ED.]

"Instinct or Reason in Bees" in Australia—A Correction.

Written for the American Bee Journal

BY JOHN MITCHELL, JR.

On page 74 of the BEE JOURNAL for July 14, 1892, is a short paragraph with the above heading. I was surprised at the statement made on the subject by the *Phrenological Journal*,

which to try and prove its statement informs its readers that bees in Australia neglect to store honey on account of our perennial summers.

Now, I think the above statement is a libel on our bees, and is calculated to impress its readers with a false idea as to the bees and climate of Australia.

I am not in a position to say when the first bees were brought to Australia. My experience has been wholly in South Australia, and I have been acquainted with bees which are known as the "common black," for 25 years, and not until a few years ago were bees imported into this colony, and those first imported were Italians, and were introduced with the object of getting red clover fertilized; but lately they have been imported to improve the strain of bees, but never with the idea suggested by the *Phrenological Journal*. Why, the black bees will gather honey as well now as they did 30 years ago, without any interference by the scientific apiarist, and until lately they have all been worked in the old box-hive, the bar-frame being only a few years old here.

Our summers are sometimes long, and some kinds of trees bloom in winter, and as our winters are not very severe, as a rule, bees can fly out every day or two, and honey is stored during winter, which goes to prove that the honey-gathering instinct in our bees is as strong in Australia as it is in colder climates.

I am a bee-keeper, and have 250 colonies, and I imported some Italian queens last year with the object of improving our common race, but not because our bees refuse to store honey, or that they have forgotten the instinct which rules bees the world over.

I should not have corrected this error, but people sometimes jump to conclusions which are not always right, although published by scientific journals. Perhaps the journal in question will make sure of facts before making statements in the future.

Adelaide, South Australia, Sept. 19.

An Experience with Robbing—Results of the Season.

Written for the American Bee Journal

BY J. E. PRICHARD.

This has been a fair season for honey in this locality. My bees have all got from 30 to 40 pounds for winter stores and if the weather keeps warm they will not need to commence to use it before Christmas, for every rainy day they raid somebody else's apiary. I never knew what robbing was until this fall. One of my colonies was up by daylight this morning, and, being election day, they started in to "elect" more stores, and by 1 o'clock the "the polls were closed," and they had been successful in cleaning out "the other party," and were looking for new worlds to conquer.

I read in the BEE JOURNAL about the black bees being good only for stinging and robbing; well, I must say my blacks come out on the alighting-board and blush to see their neighbors, the golden-slippered little angels "kukluxing" everything in the shape of an old box-hive in the neighborhood, and carrying home their ill-gotten gains with unblushing effrontery, as though they had been on a mission of mercy, and it may be they are. If they will only make a clean job of the old hulks of prehistoric times, mine (only one) included, I will think they have been a blessing in disguise.

As to their stinging propensities, they can out-sting any hornets or wasps I ever saw. I have been stung more by one colony of the proverbially "gentle little angels" than I ever was with black bees since boyhood, yet I would not give one small nuclei of the beauties for ten of the best box-hives of blacks I ever saw.

I went by the lady's apiary the other day that I induced to try the new mode last spring, and I stopped to see how much honey she had taken. "Why," she said, "I can't get any. I undertook it, and they routed me. They got under my veil, and in my hair, and I had to run."

Well, I had a good laugh at her, and then asked her to show me around. The first one we came to was an old box-hive that she had been dosing with fire and brimstone; of course there was no honey in it, only a few bees, and the balance worms. The next was an 8-frame dovetail hive. I lifted the cover, and seeing but few bees, I took out the season's crop—11 filled sections. She seemed pleased with the result, but she said, "Ah, you would not do that with that hive," pointing to the one that had routed her.

So, feeling a little disposed to be chivalrous, I lifted the cover and looked in; they were all "at home," and for some unaccountable reason all seemed to be upstairs; but as I never back out of a tight place, I proceeded to lift them out, and such an uprising of the blacks

I have not seen since the Rebellion! I expected every minute to be stung, but as they do not hurt me much, I proceeded to clean the bees off with no other implements than a knife and a dust brush. The result was 13 sections. Not a sting did I get, but all the family got stung and run for cover.

So this season's work as an apiarist makes me feel like quite a hero, and next spring, if nothing happens, I expect to bloom out as an older apiarist, but as things look now, I shall have to put pokes on my Italians to keep them out of my neighbor's hives, if indeed they do not clean them all out this winter. Candidly, they are the biggest thieves on earth. They rob just for the fun of the thing. I don't know what they want of it, for their hives are full. Why, they went down town to my other store about ¼ mile away, and went in and began to carry out the honey, and blocked up the doorway so I had to go down there and hide the honey and club them out, for they had taken possession.

Well, this is my first year's experience; I have learned a great deal, and the best thing I have learned is that I don't know much about bees, but I enjoy what I see in it, and expect to learn more next year. The 295 nice, full sections that I got this year is an incentive to prosecute the search after knowledge. I expect to procure a supply of linden trees and set them out in the spring, and hope to live to enjoy the luxury of seeing them bloom and enrich our honey stores, if they will thrive in our latitude.

I have induced one farmer to sow a lot of alfalfa clover; if it prospers, I expect to watch it closely next summer, and if it does as it is said to do by Western apiarists, I will see to it that there is more of it sown here.

I have found this year that ⅞ of all honey stored is from golden-rod, but although it is very pretty, some people object to the flavor, yet I think it elegant, and want more of it, and shall hold our "national flower" in grateful remembrance.

Port Norris, N. J., Nov. 8, 1892.

Fifty-Two numbers of the BEE JOURNAL for $1.00! Where can you find a cheaper, yet more valuable, volume of over 1,600 pages of bee-literature for that amount of money? You can't *afford* to do without it if you care anything for bees. It is worth two cents a week just to get a look at its "cheering face."

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Paid for the Paper for 5 Years.

I learned a thing from the AMERICAN BEE JOURNAL that I wish to thank you for. I worked one colony according to instructions, and made it pay enough more than the others to pay for the paper for five years.

My bees have done fairly well this year. I am truly glad that you have given the "Sunny South" a place in the AMERICAN BEE JOURNAL, and I hope to derive much benefit from it.

ALBERT VOUGHT.

Illawara, La., Nov. 10, 1892.

Poor Season for Honey.

The past season has been the poorest for honey I ever saw here. I have 130 colonies of pure Italians, and got 500 pounds of honey, although all have sufficient winter stores. Black bees have fared much worse than the Italians, as they are in good starving condition. As for this climate, there is no comparison in the two races.

P. C. GRESS, M. D.

Atchison, Kans.

Verbena or Vervain.

I herewith send an herb. Kindly give its name in the AMERICAN BEE JOURNAL. I doubt if bees ever gather any honey from it, as the purple wheat-kernel size-and-form shaped flowers are always closed in daytime. It is claimed that the herb has great curative qualities for blood diseases.

An old man of 78 years showed me the plant yesterday, and said that it had cured him of two cancers on his shoulders of 12 years' standing, and from *La Grippe* of two years' standing. He is an old neighbor, and is now healthy and vigorous. He also said that remark-

able cures were affected by it down in Indiana, where he was living, and where the best physicians have failed to make a cure.

The herb is found on the roadside and desolated house-places, and seems to be spread over a large territory in the United States, and also in Germany. A German lady brought it to notice, but no one seems to know the name of it. Neither is it found, to my knowledge, in botanical books, and all interested will be very much obliged if you will give us the name and nature of the plant.

C. THEILMANN.

Theilmanton, Minn., Nov. 11, 1892.

Prof. Cook reports as follows concerning the plant sent by Mr. Theilmann:

The plant is *verbena bracteosa*. It belongs to the same genus as our blue and white vervains, both of which are fine bee-plants. Prof. Wheeler, who identified this plant, informs me that it grows plentifully in the Northern Peninsula of Michigan.

It may be effective in the cure of cancer, but I should not like to have the opportunity to prove it. There is a deal of—shall I call it superstition, or nonsense?—about this whole matter of medicines. Why not be temperate, careful, in line with Nature's laws, and not need medicine? If we do get sick, are not good care and nursing far more efficacious than medicine, to set us right? I believe it. A. J. COOK.

Bees and Honey at the Fair.

I have read what Mr. W. I. Buchanan and Mr. F. Hahman have to say on page 524, on the bee-keepers' exhibit at the World's Fair. Mr. Hahman is right, in my opinion, except taking the colonies out in the open air. In place of taking them out, leave them stand in their place, and stretch a wire-screen 3 feet back of the hives, and 7 feet high, and cover with cheap oil-cloth, so the bees could not get into the building, and the bee-keeper could go in and take the bees out of the hive, and hold them up to the wire so the people could see them, without any danger. Bees would not stop work, and as they left the combs, they would go outside of the building through a window or place made purposely.

The honey should be in behind the screen in the same way, so that the bees could not get to it, and that would show better than if in cases.

Murray, Nebr. NOAH CLEMMONS.

Bee-Keeping in Central Michigan.

I have made inquiry among men in the pursuit of apiculture, and those that kept their bees from swarming through the month of June, received, on an average, as near as I can count, 50 pounds per colony. I let all my bees swarm except one colony. I had 18 colonies, spring count, and had 15 swarms that I hived. I made 3 nuclei. One colony had a laying worker, and before I was aware of it, until I saw bees robbing; I never saw a laying worker before, but I will know what it is now.

I obtained 15 swarms, 450 pounds of comb honey, and some 7 gallons of extracted. I think that 30 pounds to the colony would be about the average in this locality. The first swarm I had was on June 6. On April 3 the first pollen gathered from outside substances. On May 6th the first drones flew. On May 17th I unpacked the bees on the summer stands. The first head of clover was in bloom on June 5—7 days earlier than in 1891. Bee-men seem cheerful over the result of honey they got the past season. Bees go into winter quarters in good condition. If they have not honey, it is because their masters have robbed them. I cannot think that any one would be so cruel.

JACOB MOORE.

Ionia, Mich., Nov. 22, 1892.

Had to Feed for Winter.

The honey crop in this locality has been an absolute failure this year. My bees did not store a pound of surplus honey—they barely made their living through the summer. I had 63 colonies, spring count, and only two of them swarmed. This fall I doubled up several, as I had to feed a good deal—hardly half of them have enough to go through the winter. I now have 58 colonies. We had a very heavy snow on Nov. 9—the earliest for years.

AREND NYHUISE.

Chandler, Ind., Nov. 13, 1892.

No Foul Brood in Comb-Cells.

On page 606, Mr. C. J. Robinson makes the assertion that he has discovered that there is no foul brood virus in comb-cells. As this was promulgated eight years ago by Mr. Frank Cheshire, in an essay on foul brood read before the British Bee-Keepers' Association, Mr. R.'s discovery is too late for him to claim any credit. In case the reader

may not have a copy, I make an extract from the essay in question. Mr. Cheshire says:

"I have searched most carefully in honey in contiguity with cells holding dead larvæ; have examined samples from colonies dying out with rottenness; inspected extracted honey from terribly diseased colonies, and yet in no instance have I found a living bacillus, and never have been sure of discovering one in the spore condition.....This is quite what would have been anticipated, because honey by its very viscosity is somewhat antiseptic.....I have tried infecting honey and growing bacilli in it, but without the smallest approach to success."

Years ago I found not the slightest danger in feeding back honey taken from foul-broody colonies. The advantage gained by extracting, is that it forces the bees to take the medicated syrup, which, as they particularly dislike phenol, beta naphthol, and all such like drugs, is a most difficult matter to do, unless absolutely starved to it.

H. FITZ HART.

Avery, La., Nov. 5, 1892.

Bee-Keeping in Colorado.

In the BEE JOURNAL of Nov. 3rd is a synopsis of the meeting of the Colorado State Bee-Keepers' Association, and in it is also the figures of Secretary Knight's report, saying *this year's* crop. The report of Secretary Knight was for last year. This year has been the nearest failure that the bee-keepers of this State have ever experienced, but our bee-men are reaping rich harvests (in their minds) the coming year. This seems to be a characteristic of the bee-keeper generally, that, no matter what the past or the present, the future has a silver (this is doubly so in this "silver State") lining. *Faith* and *hope* are as essential to us as they are to the "pilgrim and stranger here."

This (Boulder) county has 18,000 colonies of bees, yet this season's crop of honey will not exceed 10 tons, and what is true of our county, is the same throughout the State. Bees in this section are in good condition generally, with some parts affected with foul brood, but under the present treatment we are overcoming this dreadful malady. Honey No. 1, one-pound sections, brings from 15 to 18 cents per pound; extracted, from 9 to 11 cents. D. L. TRACY,

Sec. Northern B.-K. Association.

Longmont, Colo., Nov. 14, 1892.

Bees in Good Condition, Etc.

My bees are in good condition for the winter. They stored plenty of nice honey from "stick-weeds" for them, and some for me. The forepart of the season there was hardly any honey; the bees only got a living all summer until September. Some of my sections were partly filled with comb, and others half filled. Some colonies did not start in the sections. Five of my colonies cast 7 swarms, one of which went back. One second swarm went to the woods, and I put one back. I hived the other four, which increased my number to 25.

I see on page 596 that F. B. Efird is having a discouraging time with his bee-keeping. He must not get discouraged because he did not get any sections filled this season. I failed myself, as did many others, so Mr. E. is not alone. "If you don't at first succeed, try, try again."

On page 805 of the BEE JOURNAL for June 16, 1892, is a mistake that I wish to correct. It should read, "In a few minutes she came out again." What was the cause of her leaving the hive in this way, at that time of the year, in April?

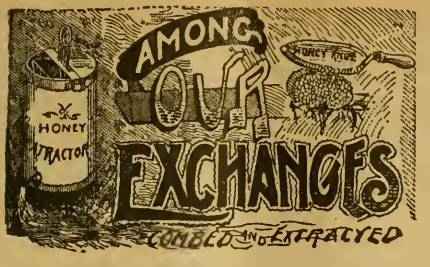
The reliable AMERICAN BEE JOURNAL comes regularly every week. I fancy the cover very much—it looks bright and clean. It has been changed from beginning to end in great style.

A. C. BABB.

Greenville, Tenn., Nov. 15, 1892.

"The Winter Problem in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apiary. Price, postpaid, 50 cents; or given as a premium for getting one new subscriber to the BEE JOURNAL for a year. Clubbed with the BEE JOURNAL one year for $1.30. Send to us for a copy.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 711, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present



Beeswax and Its Uses.

Many tons of beeswax are imported to this city from tropical and sub-tropical parts of this continent, and from Spain. Much of this comes from Cuba, where a tropical vegetation supports and employes an enormous number of bees. Much of the Cuban wax comes in great masses, shaped like the frustum of a pyramid, and weighing from 65 to 70 pounds each. In the fact that various substitutes for wax have been discovered, it is still used in great quantities in the manufacture of candles, especially for ecclesiastical use. Much of it, too, is used in the manufacture of wax lay figures, not only for museums and the like, but for milliners and mantua-makers.—*New York Sun.*

Perfection in Bee-Culture.

It is true the bee-industry has made great progress in the last 25 years, but perfection is still in the dim future. While working with the honey, is a good time to do some hard thinking, and prevent some more hard work next year.

By using wooden separators as wide as the sections, we have overcome one difficulty to a great extent that used to trouble us a good deal; that is, in getting nearly all the sections entirely finished. In the old Heddon supers without separators—and the old tin T's are but little better—sometimes whole cases would come off the hives at the end of the season, without a single section being finished, and of course unmarketable. No doubt in such cases the bee-keeper was much to blame in giving too much room, but it is not always easy to determine just how much room is needed.

Now a case or super divided into compartments for each section by wooden partitions, which experience shows the bees will finish up, although the very next section may be left entirely untouched, is certainly an advantage. Then the slatted bottom and top strips of our new super, keeping the entire outside of the section free from propolis, is a great consideration.

It is very gratifying to us to be occasionally told by grocerymen that our honey is the cleanest and nicest that they handle. We have sometimes doubted whether it really "paid" to go to so much trouble to have our honey in nearly perfect shape, while slouchy bee-men seemed to sell theirs for about the same price, but I guess that good work will be appreciated in this as well as all other occupations.—C. H. DIBBERN, in *Western Plowman.*

A Butterfly Farm.

One of the oddest industries in the State of Pennsylvania is a butterfly farm near Montrose. Frederick Newhart, who is a man 60 years old, has at least 80,000 butterflies. He has a quarter of an acre of ground enclosed with a fine wire-netting, 8 feet high. This is one huge flower-bed, only with patches of grass here and there, and several large pools of shallow water with wide, muddy edges. Here the great army of bright-winged butterflies are kept. There are many varieties, probably 50 different kinds. In one corner of the garden is a glass house for winter quarters. Mr. Newhart lives alone, and having considerable property, keeps butterflies as a mere fad.—*Exchange.*

Conditions for Honey Secretion.

The conditions necessary for the secretion of honey are peculiar, and not well understood. There have been days when we thought everything was right, yet the bees were idle. The nights have been warm, followed by hot days and a moist, balmy atmosphere, with plenty of bloom in the fields, yet there was no honey gathered. The why is a mystery. There must have been some element wanting, or nectar would have been secreted. And how do bees know when it is secreted? They may be at home one day, with very few bees leaving the hive for water, or any other purpose, yet the following day by day-break they are leaving on the double quick, and all is hurry and activity. Who told them there was honey? Do they scent it in the air?—*Field and Farm.*

Read our great offer on page 17.

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The Date on the wrapper-label of this paper indicates the *end* of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription up to the *end* of December, 1893:

Wallace Porter Dec93
Suffield, Portage co, Ohio

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We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given n the first column. One year's subscription for the American Bee Journal must be sent with each order for another paper or book:

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Canadian Bee Journal	2 00	1 75
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The World's Fair Women

"Souvenir" is the daintiest and prettiest book issued in connection with the World's Fair. It is by Josephine D. Hill—a noted society lady of the West—and contains superb full-page portraits and sketches of 31 of the World's Fair women and wives of prominent officials connected with the great Fair. It is printed on enameled paper, with half-tone engravings, and is bound in cloth, and also in black, red, white or blue leatherette, gold lettered. Just the thing for a Christmas gift to your friend. We will send it postpaid for $1.00, or give it for *two* new subscribers to the BEE JOURNAL for a year, at $1.00 each. Every woman will want a copy of this book, we feel sure.

"Bees and Honey"—see page 717.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, November 19th, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c,, according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Good demand for fancy white comb, 18@19c.; No. 2, 15@16c.; No. 3, 13@14c. Buckwheat, 12@13c. Fancy white extracted, 9c.; amber, 7½@8c.: dark, 7c.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand is good for honey, with scant supply of all kinds. Extracted brings 6@8c., and comb sells at 14@16c. for best white. Although honey is scarce, there is no demand for dark comb.
Beeswax—Demand good, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Comb honey is selling a little slow. Prices for best 1-lb.s., 17@18c. Extracted selling well from 8@9c.
Beeswax—None on hand. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—White comb is arriving in sufficient quantities to supply the demand which is gradually slackening off. We quote: Fancy white 1-lbs. 15@16c.; 2-lbs. 12@13c. Fair white 1-lbs. 12@13c.; 2-lbs. 11c. More buckwheat honey on the market than the demand reqires and in order to effect sales—prices have to be shaded. 1-lbs. glassed or in paper boxes, 10@10½c.; unglassed, 9@10c; 2-lbs. 9c. Extracted, white clover and basswood, 8@8½c. Buckwheat, 6@6½c. Southern, 70@75c. per gallon.
Beeswax—Dull at 25@26c. H. B. & S.

ALBANY, N. Y.—Honey market some quieter and prices some easier. White clover, 15@17c.; mixed, 14@15c.; dark, 10@11c. Extracted, white, 8@8½c.; mixed, 7@7½c.; dark 7c. Stocks light of both comb and extracted.
Beeswax, 27@28c. H. R. W.

List of Honey and Beeswax Dealers,

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Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas

Convention Notices.

THE NORTH AMERICAN Bee-Keepers' Association will hold its annual Convention in Washington, D. C., Dec. 27, 28, 29, 1892.
Flint, Mich. W. Z. HUTCHINSON, Sec.

IOWA.—The Eastern Iowa Bee-Keepers' Association will meet at Maquoketa, Iowa, in the City Hall, on Dec. 14th and 15th, 1892. All are invited. FRANK COVERDALE, Sec.
Welton, Iowa.

ILLINOIS.—The next annual meeting of the Rock River Bee-Keepers' Association will be held in Morrison, Ills., on Thursday, Dec. 1, 1892. J. M. BURTCH, Sec.
Morrison, Ills.

COLORADO.—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 18 and 19, 1893. Election of officers and other important business will come before the meeting.
Littleton, Colo. H. KNIGHT, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers' Association will hold its third annual session at the Court House in Charlotte, N. C., on Dec. 1, 1892. A full attendance is especially desired, and all those interested in bee-culture will have a hearty welcome.
Steel Creek, N. C. A. L. BEACH, Sec.

MINNESOTA—.The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan. 12, 13 and 14, 1893. The Thursday meeting will probably be a union meeting with the Horticultural Society which meets at the same place, commencing on Tuesday. A. K. COOPER, Sec.
Winona, Minn.

VERMONT.—The eighteenth annual meeting of the Vermont Bee-Keepers' Assocciation will be held in the city of Burlington, Vt., on Dec. 28 and 29, 1892. Every one interested in apiculture is earnestly desired to be present. As a bee-keepers' association, we know no State lines, but will gladly welcome all that come. Programs will be published soon. Holiday rates on the railroads.
Barre, Vt. H. W. SCOTT, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 711.

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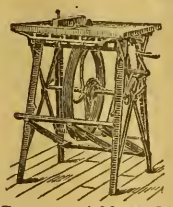

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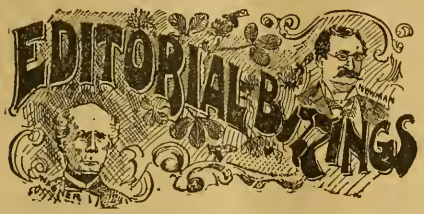


The Colorado State Bee-Keepers' Association will meet on Jan. 16th and 17th, 1893, instead of Jan. 18th and 19th, as before announced. Those who expect to attend the meeting will please remember this slight change of time, which Mr. H. Knight, the Secretary, asks us to announce.

The Illinois State Bee-Keepers' Convention "call" is received, and reads as follows:

HAMILTON, Ills., Dec. 2, 1892.

The Illinois State Bee-Keepers' Association will meet in Springfield on the 14th and 15th of this month. We hope all the friends of the bee will make it a point to attend this meeting. Illinois is one of the best honey-producing States in the Union, and should have a bee-keepers' association second to no other State society of this kind in the United States. We trust the leading bee-keepers of the State will meet with us, and we also extend a cordial invitation to our friends from other States. Many matters of importance are to be discussed. All bee-keepers are cordially invited.

J. M. HAMBAUGH.
C. P. DADANT.

Don't Fail to read all of page 749.

Bee-Keepers' Terms.—A new dictionary of the English language is now being prepared for publication, called the "Standard," and our good friend Dr. C. C. Miller has wisely been selected to edit the part referring to the words or terms used in bee-keeping. This will insure correctness at least in the portion of the dictionary treating of anything relating to our pursuit.

Dr. M. wrote us as follows about it requesting that all bee-keepers who are able to do so, should aid him in this work:

MARENGO, Ills., Nov, 29, 1892.

FRIEND YORK:—A new dictionary called the "Standard" is about to be issued. It is supposed to be an advance on Webster. All doubtless know that bee-keepers' terms are not in very good shape in existing dictionaries. Well, we have some chance in the coming dictionary, for the publishers have made me one of the special editors.

I would like to get hold of all bee-keepers' terms that are omitted in the dictionaries, or that need different definition. I will be obliged if you will send me any such, or if you will make a call in "the old reliable" for postal cards with such to be sent to me.

C. C. MILLER.

Now, let all who can help Dr. Miller, send to him whatever they think needs correction, or that should be added in this new dictionary.

To Get Rid of Ants, sprinkle the infested places with borax, and the ants will soon leave. So we have just read.

Bees in an Attic.—One of our correspondents sends in the following question, presumably for the "Query Department," but as it would be a month or two before its turn would come, and as one reply will likely be as satisfactory as a dozen or more in this case, we referred the question to Mr Green, whose answer follows immediately after the query, which is this:

Would you advise me to winter bees, which I have shut up in the hive by closing the entrance with wire-netting, in an attic where the temperature is from 50° to 60°? BUZZER.

Bees should never be confined to the hive in winter. Even at times when they would not fly, the restraint seems to excite and annoy them, and they never winter well under such circumstances.

Bees can seldom be wintered successfully in a building above ground. The temperature named is too high, though it might do provided it would be perfectly uniform. The trouble is that in your attic the temperature would probably range from 80° down to zero, or lower. J. A. GREEN.

The Illinois State Convention.—We have received the program of the fourth semi-annual meeting of the Illinois State Bee-Keepers' Association, to be held in the Senate Judiciary Room of the State House, at Springfield, Ills., on Dec. 14th and 15th, 1892.

Among the addresses, and subjects to be discussed, are the following:

"How to Advance the Interests of Bee-Culture."

Address of Welcome—Col. Charles F. Mills, Springfield.

President's Annual Address—by Hon. J. M. Hambaugh, Spring.

Essay (Subject of his own selection)—by P. J. England, Fancy Prairie.

"Do Bee-Keepers Need an Experiment Station?"—by Dr. C. C. Miller, Marengo.

Subject of his own selection—Chas. Becker, Pleasant Plains.

"Why Farmers and Horticulturists Should be Bee-Keepers"—by C. P. Dadant, Hamilton.

Subject of his own selection—by A. N. Draper, Upper Alton.

Remarks on "How to Improve Our Next Report."

It is earnestly hoped that there may be a good attendance of the bee-keepers of the State.

The following associations will be in session at the same time and place: Illinois Short-Horn Breeders' Association; Illinois Swine Breeders' Association; Illinois Sheep Breeders' Association; and the Illinois State Grange.

A rate of $2.00 per day has been secured at the St. Nicholas Hotel. Delegates to the convention are requested to write to the proprietor of the hotel for accommodations, as long before the opening of the convention as possible.

The usual excursion rates on the principal roads are promised on the certificate plan, viz.: To return members at one-third rate, who have paid full fare *en route* to the convention.

If those who cannot attend the meeting will remit one dollar to the Secretary —James A. Stone, Bradfordton, Ills.— they will thereby become a member for one year, and be entitled to the report when printed—also to the report of 1892.

The North American Bee-Keepers' Convention at Washington, D. C., on Tuesday, Wednesday and Thursday, the 27th, 28th and 29th of this month, should be well attended. Many subjects of great importance to the industry of bee-keeping will come up for consideration, and will demand the most earnest thought of the best heads in the land. Will *you* be there?

Next week we will doubtless be able to publish the programme, which is to be a grand one. Look out for it.

"Complete Guide for Caponizing," is the title of a pamphlet published by Geo. P. Pilling & Son, of 115 S. 11th St., Philadelphia, Pa.

"Bees and Honey"—page 749

The World's Fair Exhibit of bees has been discussed somewhat in these columns, and now Mr. A. G. Hill, in the *Bee-Keepers' Guide* for November offers the following suggestions about the manner of exhibiting bees at the Fair next year. Any others who have valuable ideas to offer regarding any portion of the apiarian exhibit, will doubtless be doing a favor to those who will have the matter in charge, by writing out their ideas for publication.

The suggestions and comments by Mr. Hill, referred to above, are contained in the following paragraphs:

It is our opinion that the only way to exhibit bees and make it at all convenient and educational is to use single-comb observatory hives, confining the bees as long as they are bright and healthy, and then change for a fresh comb and bees. We are not sure but wire-cloth would be better than glass, or perhaps glass on one side with wire-cloth on the other would be advisable during hot weather. The people could then see the queen, drones and workers, brood in all stages, eggs and pollen, while the experts accustomed to these sights could judge of quality by comparing the contents of different hives.

A good light will be of the greatest importance.

A lot of large observatory hives, arranged along the wall of a building in such a manner that the bees could pass through the wall and fly out over the heads of the people would hardly be satisfactory or safe. A colony of bees can easily and safely be taken away from their natural stand (away from home), and be opened up and exhibited in a crowd of people. But to place a lot of bees permanently, and bring the people up near or under them, would certainly be quite risky. Each colony would probably contain 40,000 workers, and there would be a number of colonies—bees enough, if they got mad, and wanted to do it, to take possession of the whole Fair, and run it to suit themselves. When a bee is mad and at home, or defending its home, it is not at all particular about distance, and might go a number of rods to sting some one. The safe way is to keep all the bees confined.

To show the quality and beauty of the light-colored bees, it would be nice to have the specimens confined between wire-cloth and glass with no comb at all. By looking through the cages towards the light, the best kind of a view and test of color and markings could be had. No doubt all the queen-breeders in the United States, who breed especially good stock, would be glad to furnish a fresh sample by mail every ten days, or as often as it would be necessary to keep the bees bright and fresh, if some one was engaged to receive exhibits under the owner's name and care for the bees. Such a plan would be without expense to the Fair association.

Getting Affidavits from commission men "that they will not sell adulterated honey or beeswax, they knowing it to be such," was, by resolution, "recommended to the publishers of the various bee-papers," at the meeting of the Illinois State Bee-Keepers' Association in October. The report written for the *Canadian Bee Journal*, and published on page 249 of its issue for Nov. 15th, says in substance that the editor of the BEE JOURNAL was "present," and that he "promised to do his utmost in carrying out the spirit" of the resolution. With the slight exception that we were *not* "present" when the resolution was passed, and hence could *not* have "promised" anything regarding it, that part of the report is quite correct. We fully agree with Mr. J. A. Green on this subject, that "a firm that would adulterate honey would not hesitate to furnish a false affidavit." We cannot see how the obtaining of such affidavits would help any in stopping adulteration. What is needed is a *national law* against the crime of adulteration, and nothing short of that will do any good, in our estimation.

Cleome.—It is said that no other plant known to the civilized world will produce as much honey, of as good quality, as the *Cleome integrifolia*. It is a native of Colorado, hardy, and thrives on any kind of soil. The plant grows six feet high, and is covered with a mass of bloom from June until October, and is invaluable for bee-pasture.

Field of Labor for Bee-Keepers.

In my opinion, the most promising field of labor is that of lessening the cost of honey. Honey is not a staple in the same sense that flour, meat and potatoes are. In proportion as prices of honey climb up, does the demand go down; and it is mostly in the devising of plans, methods, hives, appliances, etc., whereby the labor of producing honey may be lessened that bee-keepers must look at present for their success. The invention of the bee-escape was right in this line. Self-hivers are pointing in the same direction.

What is needed is to be able to place an apiary out here a few miles, another out in this direction, another in that, etc., and then have matters so arranged that one man can care for all of them. Or these same methods must allow a man to have an apiary at home, and be able to manage it by the use of a small part of his time, some other business taking the greater part of his time. I believe that it is in this direction that bee-keeping talent should turn its energies.—W. Z. HUTCHINSON, in the *Review*.

Large Colonies Not Best for Winter.

While it may, and no doubt does, pay to have strong colonies in the North, it will not pay, as a rule, here in the South to winter strong colonies. Anything above an ordinary colony, or about half a gallon of bees, is wintered at a loss in the South, as a moderate swarm will build up sufficiently strong, long before the honey-flow. It is worse than useless to have a powerful colony. The late Judge Andrews, of McKinney, who is high authority on bees, has well said that it was better to burn your bees off in the fall rather than have them hang around idle all the fall and winter, using honey at a great loss to the owner. This I have found to be true in this country. We need the honey here, especially in the spring, but it is best only to have a fair colony of bees, a good queen, and plenty of honey in Texas, or the Southern States.—MRS. ATCHLEY, in the *Progressive Bee-Keeper*.

Manitoba Honey.

It may yet be found that Manitoba is one of the best honey-producing countries in America, especially in wooded districts. The profusion of flowers that exists during the summer season, and the unrivalled bloom of the millions of wild-fruit trees, with the exceedingly long days of warm sunshine, make a condition of things favorable for bees. As an instance, Mr. Aitken, of Pilot Mound, who keeps a few colonies, had last season 120 pounds of honey from one colony, and the bees were last spring as vigorous as ever. Manitoba honey tastes very much like the honey gathered by bees from the blossoms of heather in the Highlands of Scotland.—*Pilot Mound Sentinel*.

The Pennsylvania State Building is shown opposite. During the past few months we have given quite a number of the State buildings that our readers will likely inspect closely next year. They afford quite a study in architecture for those who are interested in that branch of art. We have presented the pictures so that our readers might know in what building they would find the most friends and acquaintances, as naturally each one would be most interested in his or her own State building. Some of them are beautiful.

The Ladies' Home Journal, of Philadelphia, Pa., is perhaps the finest monthly home magazine in the world. If ordered before Dec. 20th, 1892, we can club it with the BEE JOURNAL—both Journals for one year—for $1.60, to *either old or new subscribers*. If you are a new subscriber to both JOURNALS, you will receive ours the rest of this year *free;* and the "Ladies' Home Journal" will begin with the January number.

Great Premium on page 749!

The Golden Wedding anniversary of Mr. and Mrs. Wm. B. McCormick, of Uniontown, Pa., was celebrated on Nov. 10, 1892, they having been married just 50 years on that date. Some 50 friends helped them to remember the occasion, and among the number of handsome and costly gifts were a gold watch and a beautiful Masonic charm. There was present Miss Sophia Gadd, who attended the wedding 50 years before, and who has bravely survived the importunate pleadings of many a would-be lover.

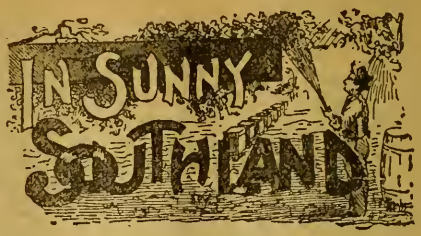
The local newspaper adds the following sketch of Mr. McCormick, who is among the host of admirers of the old AMERICAN BEE JOURNAL:

William B. McCormick was born near Smithfield, Aug. 25, 1821, and came to Uniontown with his parents in 1832. He was reared on his father's farm near Uniontown, and was educated at old Madison College. For 20 years he was a successful school-teacher in the schools of Fayette county. He was principal of the Uniontown schools from 1848 to 1860. His 71 years sit lightly upon him. He is as active as most men at 50.

He is engaged in a number of business enterprises, and is one of the principal stockholders of the Uniontown water company, of which company he is secretary. He is a high authority on bee-culture, which is a favorite pastime of his. Mrs. McCormick is a daughter of the late Matthew Allen, who served as sheriff of Fayette county for six years, having been elected in 1837 and again in 1850.

The BEE JOURNAL wishes to unite with the many friends of the happy "young couple" in the hope that they may be permitted to enjoy yet many years of purest happiness, even to the celebration of their "diamond wedding." So mote it be.

Mr. H. Kohlenburgh, who lives near Eddy, New Mexico, started last spring with 100 colonies of bees. Since then he has sold over 30 colonies, and received more than $1,000 from honey. At least, so says a Colorado paper.



CONDUCTED BY

Mrs. Jennie Atchley,

FLOYD, HUNT CO., TEX.

Can a Queen Produce Life Without the Aid of a Drone?

Dr. James Williams, of Farmersville, Tex., asks the following question:

"Does the queen-bee have the power to produce life without the aid of the male?"

Others ask from whence come the germs that fertilize drone eggs? All request me to answer and give my opinion in the AMERICAN BEE JOURNAL. With the help of a friend, I will do the best I can, for I do not think they will get a satisfactory answer from any one.

Now let us see. I believe it was Dr. McCosh, of Princeton, N. J., who said, "We must often be satisfied with facts alone, because science in a thousand things gives only the facts, but hides the reasons." Now that will be the harbor into which I may run at any time before closing this article.

Again, I have another fortification behind which we can all run for confession. It is metaphysical, it is true, but none the less real and true. Dr. Hamilton, of Scotland, author of the "Philosophy," to which I now make reference, says that "All thought is conditional." To prove this, he writes a long chapter. Now Pope means about the same thing when he says—"How can we reason but from what we know"—the mind is limited in its objects of thought. It cannot create anew.

We may use a horse for illustration. The head may be taken off and a cow's head put on; the tail may be removed, and that of a peacock put on in its place; we add the wings of a bird, the hide of an elephant, etc., but in all this the mind is conditioned or limited to objects of the senses—it can only work from what it knows. The mind is finite, aud can only have finite conception. It is limited and conditioned to finite things. It is bounded all around by the infinite,

of which our finite powers cannot take cognizance. A finite mind can only have a finite conception. We know nothing of the infinite, because we can only measure the infinite by our finite measure, which is no measure at all.

Now please note that life has never been submitted to the senses. We do not know what it is. We cannot tell from whence it came, or whither it goes. This is a matter of faith, and not of knowledge. We believe many things we cannot know. We believe that life comes from God. We believe in God, also. We think that life is but a beam of his inconceivable self, aminating matters, as we call it, but we know nothing about it whatever. What we call life germs, sperms or spermatozoa, are but animals possessing the life we are considering, not life itself, which so far in science remains the uncondition, the unknown quantity, in our algebraic equation.

Let me give you a bit of physiological knowledge, which I have acquired through my senses—the only avenues to knowledge. Under the field of a good microscope of sufficient power, sperms are of different shapes and sizes. In the lomalia of a certain species they are shaped like the "wriggle-tail," as seen in stagnant water, like the embryo mosquito. Their motions are just like these embryo mosquitoes. They possess positive electric affinity for the ova of their kind and class. Placed within a certain distance of the ovum, a sperm heads about towards the ovum; pushed a little nearer, and it makes to the embrace of the ovum with an inherent force of its own. Some might suppose that they were dealing with life itself; but not so. As well move the elephant as a sperm. Life is hidden. It is one of the uncondition things which mind cannot grasp. It belongs to the infinite, and the infinite is unthinkable.

Now, dear friends, I hope this is matter for thought; anyway it must be matter for thought, though you may have thought it all over many times.

And now I come to your questions direct. I give you what I believe, and as all belief rests upon testimony of some kind and character, I will also add the ground work of my belief.

I believe that these sperms multiply and transmit their kind. Half is hidden. They are probably oviporous in a special sense. The cow and horse are as much oviporous as the hen. Only the cow hatches her eggs within her own body, while the hen does it outside. I believe the organizer of matter is their tangible life force—the so-called "soul" in man—the gift of God, and that it has an expansive growth, too. We grow in spirit—this is a literal truth as well as a special one.

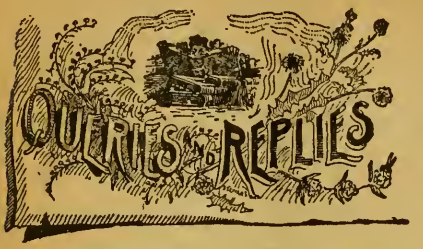
Now I believe these sperm ova pass to the mother and are retained by her (or by the queen, if you choose) for special use under an unknown law of the life force. I will illustrate by the known facts. Take, for instance, the corn aphis. There are seven generations in one summer. The first, second, third, fourth, fifth and sixth are all females. The seventh generation are male and female. The males have wings; the females have no wings. Now you see the influence of the male passes through seven generations. But how? Through sperm ova, transmitted from mother to mother, etc.

Can I strengthen this dogma? Yes, I believe I can give you a stool to sit upon while you take your breath. The bacteriologist takes a rabbit, dog, cat, etc., and introduces under the skin the spores of some of the bacteria known as consumption germs, etc. The animal sickens and ultimately dies, but often not until several broods of young rabbits come forth. Now these young rabbits transmit these obnoxious germs from generation to generation.

Again the human frame, or person, is made up of millons of cells, each one of which has the vital power of renewal, and that from day to day, and from year to year, through life. Now if a cell can beget a new cell for 70 or 80 years, and always under an established law of heredity, like producing like, then we must claim in this case some inherent right to life-giving powers. And why not one of our queens? That now is a nut for us all to crack.

Now, dear friends, please let me off, and if I had not disliked to have stolen Dr. Miller's short answer, I should have said to them, "I don't know." If any of you dear readers have any better way of answering this (to me) puzzling question, by all means let us have it, and I will be very thankful.

Our old readers will please excuse us for going over these old subjects, and take into consideration that we have a new crop of readers, and new bee-keepers that have never seen these matters talked upon. We will from time to time give all we know of bee-keeping, for the benefit of our beginners; and that is not much, for I am satisfied that none of us know it all, and probably never will. But all we can do in this line is to live and learn.



Sowing Buckwheat for Honey—Will it Pay?

Query 848.—1. Would it pay to sow buckwheat for honey? 2. If so, how would it do to furnish my neighbors seed free, in order to increase the honey-acreage?—Ohio.

2. In some places it might pay well.—C. C. MILLER.

1. Not especially for honey, but for grain *and* honey, yes. 2. A good plan to try.—EUGENE SECOR.

It might pay in the latitude of Ohio, but not south of Tennessee or North Carolina.—J. P. H. BROWN.

This is a subject that will bear much discussion and thought. I am inclined to think it would pay well, in most localities.—W. M. BARNUM.

1. No. At least not here. 2. Buckwheat here does not furnish honey enough to pay for the seed.—R. L. TAYLOR.

1. Not here. 2. We used to do this, but find that knot-weed and Spanish-needle furnish better honey at the same date.—DADANT & SON.

2. It will not pay *you* to buy seed and give to another party; it is too uncertain a honey flora, and a slow seller when you get it.—H. D. CUTTING.

1. This is owing to location. Should there be an absence of honey-producing flowers, it might pay. 2. I am not sure on this point.—J. M. HAMBAUGH.

1. Not for honey alone, but (2) it would probably pay you well to furnish seed to your neighbors. They furnish the land, and you get the honey.—A. B. MASON.

1. No; but why not also reap the buckwheat which is usually a paying crop? 2. That is a question I have never been able to settle satisfactorily.—C. H. DIBBERN.

1. In some States it pays to raise buckwheat for honey, but it does not pay in Ohio, except for the grain. Bees will work on it, but get little else than pollen.—G. L. TINKER.

1. Not for honey alone. In my locality I would just as soon not have any buckwheat planted. 2. I have doubts as to the advisability of offering any such inducements, as a rule.—JAMES A. GREEN.

1. Yes, it will pay if the bees work on it; but buckwheat does not secrete honey in all seasons. 2. Better sow on your own land, then if the honey fails, you will have the seed.—MRS. L. HARRISON.

1. I don't think it would; the field of nectar is so uncertain. 2. If it would pay at all, it would pay to furnish seed; but in my opinion it doesn't pay to sow seed especially for a honey crop.—J. E. POND.

1. Not in this locality. We have had a good buckwheat yield here this year, which is the first pound of buckwheat honey that has been produced in my apiary for the past 15 years.—G. M. DOOLITTLE.

1. Yes, if you have land, as the buckwheat will pay on its own hook; and then, if you have a favorable season, you will get honey beside, though not every year. 2. Won't pay. The honey yield is too uncertain.—A. J. COOK.

2. Yes, provided you can keep your neighbors from having the least suspicion that you want it growing for your bees. This you can't do. In most localities, such work increases bees and beekeepers faster than honey-resources.—JAMES HEDDON.

2. We sometimes furnish our neighbors with seed buckwheat, free; sometimes it pays, and at other times it does not. I would favor furnishing all that would sow within one mile of the bees, if they would not sow of their own furnishing.—E. FRANCE.

1. If you are so situated that by sowing at any particular time you could fill in a gap in the honey-flow, yes; providing you get the grain, too. 2. If you must depend upon artificial resources, perhaps buckwheat would pay as well as anything.—MRS. J. N. HEATER.

1. It depends upon how much buckwheat is in range of your bees, as to whether it will pay you. 2. It takes a world of flowers to give a flow of honey, and you would have to make a risky

investment, unless you should bargain to have your seed returned from the crops produced from the seed you furnish. In my locality, buckwheat fails to produce nectar some seasons like other fall honey-plants, and this is in the way.—G. W. DEMAREE.

1. Much depends. In a cool, moist season, in Indiana, buckwheat yields plentifully, though the honey is not first-class. In dry, hot seasons it amounts to nothing. As a rule, it will not pay to sow it for honey alone. 2. I think it would pay in fairly good seasons to give seed to neighbors.—M. MAHIN.

1. I don't think it will pay in Texas, as I have sowed buckwheat often, and at different seasons, and I have always found my bees would work on something they seem to love better. 2. From what I have read about buckwheat in Ohio and other Northern States, it might pay there. If I lived there, I should certainly try it, and if it paid, I would furnish my neighbors seed free.—MRS. JENNIE ATCHLEY.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

Dec. 13, 14.—Michigan, at Lansing, Mich.
Geo. E. Hilton, Sec., Fremont, Mich.

Dec. 14, 15.—Illinois, at Springfield, Ills.
Jas. A. Stone, Sec., Bradfordton, Ills.

Dec. 14, 15.—Eastern Iowa, at Maquoketa.
Frank Coverdale, Sec., Welton, Iowa.

Dec. 27-29.—North American, at Washington.
W. Z. Hutchinson, Sec., Flint, Mich.

Dec. 28, 29.—Vermont, at Burlington, Vt.
H. W. Scott, Sec., Barre, Vt.

1893.

Jan. 13, 14.—S.W.Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.

Jan. 16, 17.—Colorado, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.

Jan. 12-14.—Minnesota, at Minneapolis, Minn.
A. K. Cooper, Sec., Winona, Minn.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

Read our great offer on page 749.

How Far do Bees Fly? Ripening Honey, Drones, Etc.

Written for the American Bee Journal
BY G. W. DEMAREE.

During the honey-flow in October last, I had very favorable opportunities to judge correctly as to how far bees will fly under ordinary circumstances and gather a profitable return of honey.

My locality is a closely farmed section of the blue-grass country—and there is but little waste land to nourish wild flowers. In the month of October, all blooming plants have disappeared except the white asters; this plant blooms until hard frost cuts off all green growth.

East of my location about one mile, one of the tributaries of the Kentucky river takes its rise, and the country is cut into hills and water-courses, and attending waste lands, and here the white asters bloom as white as buckwheat fields. Onward from this point, say one mile in air-line from my apiary, and for many miles eastward, the aster fields are like great buckwheat fields, "white for the harvest." This harvest comes in October in our climate, and if the weather is good, the aster yields bountifully.

I have a friend that lives about six miles in *air line* from my location, and his apiary is located right in the center of these aster fields, and my apiary is on one side of them, and a mile from their outer lines. During good weather in October, I could follow my bees in their flight toward these aster fields as easily as if there had been one swarm after another traveling that way in quest of a home. Notwithstanding this busy work of my bees, I believe my friend's bees, located as they were right in the midst of the harvest fields, beat my bees at least 50 per cent. in the amonnt of honey stored from the asters.

These facts lead me to believe that from a central point, two miles or less,

in every direction, will cover a profitable field for an apiary.

The greater the light thrown on this subject, the greater is the evidence that bees do not work profitably at a great distance from their base of operation. If bees fly in quest of honey 3, 4, and even 7 miles, as some have reported, I am unable to account for the fact that my bees fell so much behind my friend's bees under the circumstances above related.

HONEY—THE PROCESS OF RIPENING.

Last season (1891) the weather was just right for the production of the very finest flavored honey, while this year (1892) was the very opposite. This year the humidity of the atmosphere has been abnormally excessive, and there has been no first-class honey secured this year (1892). Ought not this simple fact of *weather causes*, to settle the question concerning bees "digesting nectar" into honey? I have experimented carefully along this line, and I do not yield *facts* to "theory."

One of my repeated experiments to test this matter of ripening nectar must carry with it conclusive conviction, that the ripening process of perfect honey depends upon conditions outside of the bee's transporting sac. My experiment was conducted as follows:

Last year (1891) I was crowded for room, as the yield of nectar was rapid and abundant, and to keep the bees going I departed from my usual custom and took a great number of combs that were only partly sealed. These combs were first passed through the extracting process to remove all the unsealed honey, and this unsealed honey was put into a tank by itself—then the uncapping was done, and the honey from this source was put into another tank.

No experienced honey-producer could fail to discover a marked difference in the quality of these two lots of honey. That taken from the open cells was thinner than the other lot, and its flavor was not so distinct; and when granulation took place, when cold weather came on, the difference was still more remarkable. No close observer would have admitted (not knowing the facts) that the two lots of honey came from the same hives at the same time.

The honey that came from the open cells had a white, starchy appearance, and developed an undue amount of "glucose," no doubt brought about by the slower process of artificial evaporation. The past season the experiment was repeated with more marked results in the same direction.

It is a remarkable fact that the more rapidly nectar is gathered, the better the quality of the honey.

I think the secret of good, normal honey is locked up in good weather. Good weather makes good honey.

DRONES—PROGENY OF VIRGIN QUEENS.

Are they capable of propagating the race as potent male bees? This is the question pure and simple. If such drones are *sterile*—incapable of co-operating with the female in propagating their kind, then "parthenogenesis" is nothing but a fact that can have no other interest than ordinarily attaches to any other freak in nature.

No well-informed entomologist will doubt or deny "parthenogenesis" as he understands its true application to bees. But those sanguine authors who assert that the fertile male honey-bee descends from the mother-bee without the direct, or indirect, or recurring co-operation of the male, should not be surprised or offended if they are asked for the proof, since this is a matter that can be demonstrated by practical experiment. Let us have the proof before we are charged with "snorting at high criticism."

I have labored for years by practical, and practicable, experiment to prove that the progeny of the virgin queen is *fertile*. The climate of my locality is peculiarly suited to such experiments.

All that is necessary to a fair test of the "fatherless drones," is to keep over the winter some virgin queens, provide them with drone-combs so as to have the drones well developed in size; now rear some young queens so as to have them old enough to fly out to meet the males two or three weeks before drones are out from hives that have fertile queens. In my locality the experiment must take place between the first of March and the 10th or 15th of April. I have watched the young queens and the "fatherless drones" as they would take their flights in a most natural way, but all has been a failure, though the experiment has been repeated time and again. Not in a single case have I succeeded in having a young queen mated until drones were out from colonies having fertile queens.

To me the experiments were conclusive, but they might be repeated in some seclusive locality where no mistake could be made, and it is to be hoped that some capable person, favorably situated, will take up the experiment and prosecute it to an undisputed conclusion.

Christiansburg, Ky.

Season of 1892—Bees in a Flood, Etc.

Written for the American Bee Journal
BY W. J. DAVIS, 1ST.

DEAR OLD JOURNAL:—After six or seven years of almost honey famine, and when it began to look as though the keeping of bees must be abandoned, we have been favored again with a fair honey yield.

The season of 1891 was particularly bad in Northwestern Pennsylvania—but little honey, and that of poor quality—and as a consequence the spring of 1892 found many empty hives, some small bee-keepers losing every bee, and my own apiary reduced to about 50 colonies. Notwithstanding the almost constant rains during the whole month of May, the colonies left picked up wonderfully.

On the night of June 4th, an awful flood of water came pouring down the valley of the Brokenstraw river, destroying quite a number of colonies. My home apiary—the very cream of hundreds of colonies selected as the very best for seven years past—would all have been swept away, had I not, with the help of a neighbor, carried them to places of safety. With lanterns we waded the swiftly running and rising waters, and saved all but six.

At the same time that the Brokenstraw was overflowing all its banks, Oil Creek was carrying death and destruction on its mad waves, to the cities of Titusville and Oil City. The great loss of human life, as well as property, in the two cities mentioned, caused their calamities to be duly chronicled in the daily papers far and near, while the loss of $100,000 to $150,000 in property, in the valley of the Brokenstraw attracted but little attention, as no human lives were lost.

Sunday morning, June 5th, dawned bright and warm upon the earth. The locust, the blackberry, and the raspberry were beginning to open their nectar-yielding bloom, and the bees sallied forth to secure the tempting sweets; but, lo! my bee-garden was a different looking place from the day before. The waters still prevented the placing of the stands, many of which were piled against a picket fence. The only alternation was to shut some of the colonies in with wire-cloth, and others went to work and were allowed to remain five or six rods from their former location; so changed was everything that they worked from their new location without loss.

From berry blossoms, clover, basswood and buckwheat, I have secured an average of about 40 pounds per colony, of comb honey, and an increase of 100 colonies, all heavy in stores of the best quality. So we are thankful that the dark clouds that have so long hung over our chosen pursuit, have shown their "silver lining," and we have some courage left to struggle on against adversities.

Long live the old, reliable AMERICAN BEE JOURNAL.

Youngsville, Pa., Nov. 16, 1892.

Bees in California—Their Introduction; Harbison, et als.

Written for the American Bee Journal
BY W. A. PRYAL.

A Californian can look back with a commendable degree of satisfaction upon the progress his State has made in apiculture. This industry is more recent in the Golden State than most of the other rural pursuits carried on there. We know that pure agriculture was introduced into California by the Roman Catholic missionaries some years before the Revolutionary Fathers thought of striking for American independence. These *padres* planted the vine, the olive, and other fruits, and even grains when the Pacific portion of our vast dominion was unthought of by the denizens of the Eastern part of the American continent.

But while the pioneers of Californian civilization and agriculture did so much to develop rural economy, they did nothing for apiculture which we can thank them for, for we have not heard that they brought the toiling bee with them when they planted the seed of those fruits which have since made California the most world-renowned fruit-land in the world.

As far as we can learn, the introduction of the honey-bee is due to a later period, and to secular enterprise. Therefore, while Californians have much to thank the aforesaid missionaries for, they also owe a big debt of gratitude to the men who caused the honey-bee to roam at will through its wonderfully fruitful valleys and balmy-laden hills and mountains.

As a branch of rural economy, apiculture can hardly be said to be second to none other in the State named. It will be unnecessary for me to dwell upon the

magnitude the business has obtained. It will be my purpose to rather review the past—the early history of bee-keeping in the modern land of "milk and honey."

HARBISON'S LITERARY WORK.

There is before me a volume which has been out of print these many years. Its imprint shows that it was published in San Francisco, in 1861, thirty-one years ago. Its author was that prince of bee-keepers—J. S. Harbison—a man who, beyond doubt, has produced more honey in one year than any other single apiarist. Thirty-one years ago—nay, a score of years ago, he had not the reputation as a "bee-king" that he has since achieved—he was a simple apiarist on the banks of the sluggish Sacramento, a few miles below the capital. At that time he was, of course, one of the most prominent bee-men in the State—perhaps I should say the largest, for it is doubtful if there were any who owned more colonies than he did at this period. But in those times he did not count his bee-property by the thousands of colonies as he did a decade or so later.

Mr. J. S. Harbison deserves to rank with Mr. Moses Quinby and Rev. L. L. Langstroth, as an inventor and disseminator of apicultural literature. Not that his inventions were greater, or his book better, than those of both, but because they deserve a place alongside the others for paving a way to the solution of the "mysteries of bee-keeping."

"THE BEE-KEEPERS' DIRECTORY."

The book I mention is entitled, "The Bee-Keepers' Directory: or the Theory and Practice of Bee-Culture." The title page further states that the work is based upon 18 years' personal study of the habits and instincts of the bee. It is well printed upon heavy book-paper, contains 440 pages and 80 illustrations, some of them being wood-cuts, and a few lithographs. To my mind, in point of number and excellence, its illustrations outrank those I have seen in any contemporary book on apiculture. The books of American authorship of any note antedating it, are those of Miner, Langstroth and Quinby.

The "Directory" is the first bee-book to give any extended notice of the Italian bee in this country. The chapter on this bee is accompanied with colored, life-like lithographies of a worker, queen and drone. The most interesting part of the chapter is that on the introduction of this bee into California. The correspondence there, as reproduced, also throws light upon the first importation of Italian bees into this country.

A valuable letter, from an historical point of view, is given on page 384. It is in the nature of a communication from Mr. A. J. Biglow, of Sacramento, Calif., to the *California Culturist* of San Francisco. Mr. Biglow had gone East early in September, 1860, to satisfy himself whether the Italian bee was actually superior to the common bee. He writes from New York under date of the 28th of the month named. He says:

"I am fully satisfied that they [the Italians] are [better.] I find a greater difference between them and the common kind, in their appearance, than I expected. The Italians are truly beautiful to one who is an admirer of the industrious little insect. There are two or three parties who have imported the Italian bee from Europe; but, as far as I can learn, there are only two queens in this country that are direct from the mountains of Italy, where the black bee is not known; they are in the hands of Mr. S. B. Parsons, of Flushing, N. Y. I have procured a few queens of him, and shall use every effort in my power to try and get them through safely to California."

Another letter of perhaps even greater importance is one from Mr. Biglow, after he had returned to his home. It was written on Dec. 29th, and sent to Mr. Harbison in reply to the latter's inquiry about the history of the importation of Italians to America; also as to Mr. B.'s experience with them. This letter covers over two pages of the "Bee-Keepers' Directory." From it I extract the following, which I think will be interesting reading to all bee-keepers:

"Richard Colvin, of Baltimore, and Samuel Wagner, of York, Pa., have made several attempts to import these [Italian] bees, but had been unsuccessful until the autumn of 1859, when Mr. Colvin succeeded in getting a few colonies through safe; which, however, did not survive the winter.

"Next in order of date, is the importation of Mr. P. J. Mahan, of Philadelphia.

"In the spring of 1860, Mr. S. B. Parsons, of Flushing, L. I., succeeded in getting a few colonies alive direct from Italy.

"The last importation was by Messrs. Colvin and Wagner, sometime during the past season [1860]. Two of these importations are from Germany, and one from Italy."

(Continued next week.)

Wintering Bees—Description of a Bee-Hive.

Written for the American Bee Journal

BY A. E. JAMESON.

In order to describe my method of wintering bees, it will be necessary to give a description of the hive I use.

The bottom is made of ⅞-inch lumber, nailed on cleats and grooved ¼-inch deep, and ⅞-inch wide on the edges, and back end for the body to rest and slide on.

The body has a portico, and takes frames 9⅛x17⅝ inches, with a 20-inch top-bar, and bee-space above the frames, with a cover the same as is used on the dovetailed hive, flat top.

The supers are 21 inches long, and ends rabbeted so that two supers can be used with a set of brood-frames. Each end has a ⅝-inch hole bored one inch from the top in the center, and screened on the inside. T tins cross 1⅜ inches from each end, on which section-holders rest, and are clamped with a "follower" and wedges. Section-holders of any width can be used. This super has a bee-space at the ends of the section-holders and above, and has ventilation through screened holes.

To prepare for winter I put on one empty super, with a "Hill's device," butter-dish, or the like, over the frames, and place a quilt or thin cushion over all, and leave the space between the cushion and cover empty; the ventilation holes are open except in very cold weather, when I close them with corks.

The hives are placed by a fence, facing south, and straw-banked on the north, with boards or poles projecting over the fence and straw put on them, covering the hives, but not from the sun. I raise the covers sometimes and let it shine in.

I made my own hive eight years ago, and have had fine success with it, although my bee-ambition has been dampened by discouraging advice from friends; kicked, cuffed and trampled on, and poked fun at, I still hold on to it, and got a good supply of honey, for which I am receiving a fair price near home. In addition to my work at home, I handle bees for others, and have had experience with bees of all kinds, and in all kinds of hives, including an old one once owned by Dr. C. C. Miller, for the good Doctor once "rusticated" in this "neck of the woods." I will not say anything about the Doctor's hives, nor bees, if he does not poke too much at my hive. I am only 27 years old, Doctor, and can reform, if convinced that I am astray.

I hope to be ever for the interests and good treatment of my little friends—the honey-bees.

Weeping Water, Nebr., Nov.14,1892.

Hearing of Bees—Worker in a Queen-Cell.

Written for the American Bee Journal

BY FRED BECHLY.

The editor asked the bee-keepers to write about their observations made during last season, so here goes.

I took a virgin queen from a natural swarm, caged her, and laid her in front of a queenless colony; the bees covered the cage at once, trying to get her out. As the queen had been taken from a natural swarm, she kept on piping, the same as if she had been with her own bees; but while the queen was piping, every bee stopped work until she was still, when they would commence to pick at the cage, to stop again at the first note of the queen. This was repeated several times while I watched them. I finally opened the cage and let her run into the hive. This leads me to believe that bees can hear. If they cannot, why was the voice given to the queen?

WORKER-BEE IN A QUEEN-CELL.

During the summer I reared several queens, by removing the old queen to get cells started. In due time I cut out 8 to 10 fine, large cells, built on the lower edges of the combs. In from 12 to 14 days all hatched but three, that I left them until the 18th day, when I took a knife and cut off the caps. Two contained dead queens, and one a perfect worker-bee, but a little too weak to crawl into the hive. I think it would have hatched in a day or two.

Searsboro, Iowa, Nov. 12, 1892.

Something Learned from an Experience with Foul Brood.

Written for the American Bee Journal

BY RANDOLPH GRADEN.

How often have I smiled at some assertions in the BEE JOURNAL, made by some that easily jump at conclusions; but still I hesitated to correct them, but thought I would leave it to some one better qualified than I am to write.

Some time ago I was on the verge of conteracting the theory of the germs of foul brood being in comb foundation unless subjected to a certain high degree of heat. Now with what experience I have had with foul brood, I do not think that the disease can be spread by the use of comb foundation, and no matter if it only has been heated enough to work into foundation; provided, however, that the foundation has not afterwards been exposed to the disease.

But now comes Mr. C. J. Robinson, (see article on page 606) who says:

"Here I record my discovery of what I know to be a fact in Nature, well knowing, too, that none will believe my assertion or doctrine at present." Further he says: "Pure honey, while in comb-cells, never is—never was—charged with foul brood virus."

Now, as I wrote my experience with foul brood in 1889, I know that I have not exaggerated the article, but with what experience I have had since, I could add a great deal more to it. If Mr. Robinson had seen that article, he would have noticed that I claimed that bees in robbing a foul-broody colony, and flying less than one-half mile, did not get the disease, and would now also add that said apiary was since moved to within 15 rods of my own apiary, and whenever anything goes wrong with my neighbor's bees, he comes after me to see what the matter is. Still, I never have seen any, or never heard of any, foul brood among my neighbor's bees.

Oh, no, Mr. R. is not the first one to discover that "pure honey, while in the comb-cells, never is—never was—charged with foul brood virus;" for if it was so charged and contained the germs of disease, why, it would certainly not be pure; and the bees that I referred to in my article (see page 166 of the AMERICAN BEE JOURNAL of March 16, 1889] would have become diseased.

Now, for the benefit of those that might be unfortunate enough to get the disease among their bees, I will extend this article a little further, and will say that in the latter part of the season of 1891, my business took me away from home about two months. Upon my return home, I walked through my apiary, which was about the last of October, and I noticed a small cluster of bees—about two teacupfuls—on the branch of a cherry-tree, and as it was quite cool, and very few bees flying, except at two hives the bees were very actively flying, and upon going to the hives I found that one colony was robbing the other, so that what bees were left in one hive swarmed out and clustered where I found them.

Now let me say right here, that this colony was rather weak in the spring, but they built up quite rapidly during the honey-flow in July, so that I thought they would cast a swarm, and I put a case of sections on the hive, which they entered and built the sections full of comb, and stored some honey, but did not cap it. Along about the first of August they hung out in large clusters during hot spells, but now upon examining the cause of the robbing, I found that they were rotten with foul brood.

Now let us follow the colony that did the robbing, as they were located about 30 feet from the foul-broody hive, and they had carried out the most of the honey from six frames of the Gallup pattern, and, as it looked, took some of the honey from every frame. The hive contained 14 Gallup frames (that is, the foul-broody one), and the robbers were in a ten-frame Simplicity hive, and they wintered and came out strong in the spring.

As my bees cast only about one swarm to every 10 colonies of bees this season, the colony that did the robbing was watched very closely for the disease to appear, but they cast a swarm of bees and stored a case of 28 sections of comb honey, and when I prepared them for winter, they appeared just as healthy as any in the yard.

Mr. R. and others claim that it is the weak colonies that become diseased first; but that is not my experience, as at least two-thirds of the colonies that became diseased in my apiary were my strongest colonies.

In the spring of 1884, my 16 colonies of bees dwindled away until I lost all I had, and upon cleaning out the hives I noticed that the combs and hives had a very bad smell, and that the combs contained a rotten mass of brood, but I thought it was chilled brood that had rotted on account of being left in the hive too long after the bees had died; but I cleaned out the hives as best I could, and rendered the combs into wax, and purchased another colony in a ten-frame Simplicity hive, for which I paid $10, and started again.

That season they did well, and increased to 4 colonies, which wintered in good condition, and everything went on nicely until about the close of the honey harvest, or July 20th or 25th, when I examined some of my strongest colonies that had not as yet cast a swarm. I

found the same rotten and stinking matter in the center of the brood-chamber, in some of the combs, that I had seen in the hives that I cleaned out the previous spring when I lost all I had. Then, and not until then, did it dawn upon my mind that my bees had the disease called "foul brood," and you may imagine I was sick.

My first decision was to pile all my hives and bees (of which I had then some 7 colonies), and burn them up, including all the fixtures, and plow up the yard, and then begin anew. But upon thinking it all over carefully, and becoming convinced that I would not be safe even by doing so, as I would be just as liable to get the disease among my bees as I was before, as I did not know from whence it came in the first place; so I then and there concluded to fight the disease to the bitter end.

I looked up all the bee-literature I could, and corresponded with some that I knew had some experience with foul brood, one of which was Mr. J. E. Pond, of Massachusetts, who very kindly offered me all the information he could give on the subject of foul brood, for which I hope he will accept thanks even at this late date.

I tried all the remedies I saw recommended, and also some of my own get up, and I am glad to say that I have succeeded, and that I have kept right on increasing my colonies, although I lost quite a few colonies, and would still lose them if I did not notice the disease until it was too late in the season to treat them. Still, I never destroyed any of the fixtures, such as hives and frames, but used them, and have many a colony in hives that were rotten with foul brood some years ago. I have colonies of bees that had the disease some years ago, that are in good condition for winter now. One colony that I now have, has no less than 40 pounds of honey in the hive, and in prime condition, that some years ago was rotten with foul brood early in the season, so that it was all they could do to increase and gather enough stores to winter on; that colony stored 28 sections of comb honey, which was mostly No. 1, and some sections would pass for "extra fancy," which, for this season, in this locality, is a big thing.

I also have evidence to show that a queen reared in a foul-broody colony will live more than one year; that is, as far as the disease is concerned. I also know from what experience I have had, that there is not a particle of danger in using comb foundation that is made from wax rendered from foul-broody combs, if not afterwards exposed to the disease.

Now, if any of the readers think that it is not the real foul brood that I had to contend with, I would again refer them, for the description of the disease, to my article in the AMERICAN BEE JOURNAL for March 16, 1889, as aforesaid.

In conclusion, I would say that with what experience I have had with the disease, if the time of season was May 1st, and I had no bees, and wanted to get some, and one man offered me 20 colonies of black bees in box-hives for a certain amount, and those bees were in a healthy condition; and another man had 20 colonies of Italian bees in movable frame hives, but the bees were all more or less effected with foul brood, which I could have for the same amount that I was asked for the healthy black bees in box-hives, I should take the foul-broody bees in movable-frame hives in preference to the healthy bees in box-hives, as it would cost me less to rid the bees of the foul brood disease than it would to purchase new hives and fixtures and transfer the bees to the new hives from the box-hives.

Taylor Centre, Mich., Nov. 16, 1892.

Bees at an Experiment Station—Taking Bees from a House.

Written for the American Bee Journal

BY PROF. C. L. STRICKLAND.

The bees at the Experiment Station are once more put away to take that peculiar rest. If in a state insuring solid comfort, I am glad the industrious little creatures have a period of rest from their incessant toil. It does my soul good to view them behind those board walls, facing the east, with cushions on just above the brood-nest, for surely with good stores close at hand, they must be at peace. We don't need a bee-cellar here.

The results of bee-work at this Station have been encouraging from the start, and I believe has a promising future, though only two years old. More and more alfalfa is being sowed, and that insures a crop of honey, with reasonable conditions.

BEES IN THE SIDE OF A HOUSE.

Just the other day a man called and wanted me to take a colony of bees out

of the side of his house, between the plastering and siding, 8 feet above the ground. The combs were about 30 inches long, by 18 inches wide, and 4 inches deep; being four layers. It was a tough job, for I could not get the bees out of the way—they were cross. They did all this work through a knot-hole one inch in diameter. They had a nice lot of honey. I put the combs into frames, and placed all in a nice hive.

Of all journals that reach my desk, none are grasped and opened with such a degree of pleasure as our great AMERICAN BEE JOURNAL. Long may it live and prosper, is my wish.

Peabody, Kans., Nov. 18, 1892.

Further Experience with the Punic Bees.

E. R. ROOT.

Some of our friends may be interested in knowing how those Punics are behaving of late. We have been watching them narrowly ever since our first reports. Regarding their bad traits, we have nothing to take back, but, on the contrary, we are sure that we did not condemn them any too severely. But among all their naughty habits it would be a little singular if we did not discover at least *some* partially redeeming quality. Well, we have found *one*. They are the best defenders of their home against robbers, of any race of bees we have ever known. Indeed, when the robbers are the worst, we find we can pull the cover off their hive and leave their combs exposed for hours at a time; and although the robbers will at first pounce on to them fiercely, in a few minutes they begin to find they have "got the wrong pig by the ears," and then they hover about more cautiously. Those "little black devils," as one of the boys calls them, will stand in military array along the edge of the top-bars; and the *first* robber bee that comes within smelling distance will be met on the wing, and perhaps jerked down between the combs, and that is the last of Mr. Robber, for two or three Punics will very soon finish "him" up.

Our experiments were made somewhat late in the season; but we believe it would be safe to move the cover off at any time of the year, if the hive be well shaded. This trait is a very desirable one; but at the same time it is overbalanced by so many bad ones, that, if all Punics are as naughty as ours (and reports seem to show it), bee-keepers having them will soon brimstone them.

We might add, in this connection, that this same skill in defending their home renders them terrific robbers, for no ordinary bee is a match for a Punic in a hand-to-hand combat. One time last summer, when the bees got to robbing, we noticed that there were two Punics to one Italian, helping themselves to the ill-gotten gains; and this, notwithstanding there were 200 times as many of the yellow bees as of the black in the apiary. Suppose the situation were reversed, and the honey-house door should be left open—what then?—*Gleanings*.

Medina, Ohio.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Bees in Good Condition for Winter.

Bees in this locality go into winter in good condition, with plenty of stores that are well ripened. The honey-flow in this part of the State was good, but bees were too weak in numbers to obtain the best results.

OREL L. HERSHISER.

Buffalo, N. Y., Nov. 26, 1892.

Not Weary of Bee-Keeping.

I saw some accounts something over two years ago in regard to bee-keeping in North Carolina, so I sold out and went there, but I was disappointed by the misrepresentations. I spent over $150, and being a man of limited means, one can easily see where it put me.

I have been in the bee-business since the spring of 1874, and have had my ups and downs, but I am not weary of it yet. I am what you would call a specialist. I am also a specialist or scientific bee-hunter; I found 36 bee-trees the past season. Long live the AMERICAN BEE JOURNAL! G. S. HECKMAN.

Dawkins, Ind., Nov. 24, 1892.

Results of the Season.

In June the bees had the appearance of storing lots of honey. They filled the crates ready to seal up. I watched them closely, to see them seal their honey, so I could take off the honey. In a few days I looked at them again, and they were taking it out of the sections and depositing it in the brood-frames. In August they began to gather honey from wild asters and golden-rod, then I got some surplus honey and 4 swarms. I returned the swarms to the parent colonies. The Italian bees are in fine condition. R. D. DAVIS.

Commercial Point, O., Nov. 20, 1892.

Jelly-Glass Bee-Feeder.

The year before last fruit was plentiful, and I bought a case of jelly-glasses. They were delayed in coming, so some were left over unused. This fall I wanted a feeder, so I went to my wife's jelly-glasses, picked out a few with tight-fitting tops, and with a harness-awl I punched it full of holes, filled it with honey, and placed it in the super above the bees, upon two small pieces of wood, so that the bees could pass freely under.

The advantage of this feeder is, that it costs nothing, for you only "borrow of your wife;" next, you can regulate by the number of glasses you put into the super; and, third, being glass, you can see at a glance if they need replenishing. E. B. ELLIS.

Cooksville, Ills., Nov. 27, 1892.

Work Done by Bees—Report.

On page 624, under the above heading, it is estimated that one must make 3,750,000 trips to bring in a pound of honey. Suppose a colony contains 60,000 bees, and 40,000 of them are gathering honey, and they bring in a pound in an hour; for convenience in calculation, say 3,600,000 trips, or 1,000 trips per second. Now suppose a bee crawls two inches per second, and an army of them are coming out two deep to the inch—it would require a hive-entrance 60 inches long to accommadate them, supposing the loaded bees entered by another hole. We have seen bees swarm say 60,000 in five minutes, this would be 200 per second; but according to the 3,750,000 calculation, we must work five times as fast as this, if we ever "get there." Well, if either I or my bees ever "get there," it is time we began to hustle, I tell you.

There was a calculation somewhat similar to this in the *Canadian Bee Journal* a year or so ago, but I misplaced it, and when I saw what was said on page 624, I hailed it with delight, and showed it to my bee-friends; but you see now I am in doubt about it.

I have had a swarm (not single ones) which would weigh over 60 pounds, six feet long, one foot wide, and from one to six inches deep; but a single swarm which weighs 15 pounds, is not to be "snuffed at," viz.: 60,000 bees, allowing 4,000 to the pound. I have had a colony in a Jones hive (no super on), and 12 frames, that stored 22 pounds in two days, of basswood honey. If I remember, neighbor Corneil got 18 pounds in one day.

I started last spring with about 200 colonies; had 100 supers on with perforated zinc bottoms and drone-combs, with one or two brood-combs from below (I intend putting on four or five next year). I secured 6,000 pounds of extracted honey, and got 7 cents, less ½ cent for freight and 1 cent for cans, for the light honey; and 3 cents, less ½ cent for freight and 1 cent for cans, for 1,000 pounds of dark honey.

R. F. WHITESIDE.

Little Britain, Ont., Nov. 21, 1892.

Plenty of Honey for Winter.

Although the season has been the nearest to a total failure as far as a crop of honey is concerned that I ever had, I shall brace up, pull down my vest, and try again. So, of course, I must have the "Old Reliable" to help do the bracing. There is one consolation, the bees have plenty of honey to winter on, and I live in hopes of doing better another season. S. H. MALLORY.

Decatur, Mich., Nov. 25, 1892.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 711, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

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Wallace Porter Dec93
Suffield, Portage co, Ohio

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	Price of both.	*Club.*
The American Bee Journal	$1 00	
and Gleanings in Bee-Culture	2 00	1 75
Bee-Keepers' Review	2 00	1 75
The Apiculturist	1 75	1 65
Bee-Keepers' Guide	1 50	1 40
American Bee-Keeper	1 50	1 40
Canadian Bee Journal	2 00	1 75
Nebraska Bee-Keeper	1 50	1 35
The 8 above-named papers	6 25	5 25
and Langstroth Revised (Dadant)	2 40	2 25
Cook's Manual	2 00	1 75
Doolittle on Queen-Rearing	2 00	1 65
Bees and Honey (Newman)	2 00	1 75
Advanced Bee-Culture	1 50	1 40
Dzierzon's Bee-Book (cloth)	2 25	2 00
Root's A B C of Bee-Culture	2 25	2 10
A Year Among the Bees	1 50	1 35
Convention Hand-Book	1 25	1 15
History of National Society	1 50	1 25
Weekly Inter-Ocean	2 00	1 75
The Lever (Temperance)	2 00	1 75
Orange Judd Farmer	2 00	1 70
Farm, Field and Fireside	2 00	1 75
Prairie Farmer	2 00	1 75
Illustrated Home Journal	1 50	1 35
American Garden	2 50	2 00
Rural New Yorker	3 00	2 25

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

The World's Fair Women

"Souvenir" is the daintiest and prettiest book issued in connection with the World's Fair. It is by Josephine D. Hill—a noted society lady of the West—and contains superb full-page portraits and sketches of 31 of the World's Fair women and wives of prominent officials connected with the great Fair. It is printed on enameled paper, with half-tone engravings, and is bound in cloth, and also in black, red, white or blue leatherette, gold lettered. Just the thing for a Christmas gift to your friend. We will send it postpaid for $1.00, or give it for *two* new subscribers to the BEE JOURNAL for a year, at $1.00 each. Every woman will want a copy of this book, we feel sure.

"Bees and Honey"—see page 749

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, December 8th, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c., according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Good demand for fancy white comb, 18@19c.; No. 2, 15@16c.; No. 3, 13@14c. Buckwheat, 12@13c. Fancy white extracted, 9c.; amber, 7½@8c.: dark, 7c.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand is good for honey, with scant supply of all kinds. Extracted brings 6@8c., and comb sells at 14@16c. for best white. Although honey is scarce, there is no demand for dark comb.
Beeswax—Demand good, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Comb honey is selling a little slow. Prices for best 1-lb.s., 17@18c. Extracted selling well from 8@9c.
Beeswax—None on hand. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—White comb is arriving in sufficient quantities to supply the demand which is gradually slackening off. We quote: Fancy white 1-lbs. 15@16c.; 2-lbs. 12@13c. Fair white 1-lbs. 12@13c.; 2-lbs. 11c. More buckwheat honey on the market than the demand reqires and in order to effect sales—prices have to be shaded. 1-lbs. glassed or in paper boxes, 10@10½c.; unglassed, 9@10c; 2-lbs. 9c. Extracted, white clover and basswood, 8@8½c. Buckwheat, 6@6½c. Southern, 70@75c. per gallon.
Beeswax—Dull at 25@26c. H. B. & S.

ALBANY, N. Y.—Honey market some quieter and prices some easier. White clover, 15@17c.: mixed, 14@15c.; dark, 10@11c. Extracted, white, 8@8½c.; mixed, 7@7½c.; dark 7c. Stocks light of both comb and extracted.
Beeswax, 27@28c. H. R. W.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT, 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs

Your Neighbor Bee-Keeper

—have you asked *him* or *her* to subscribe for the BEE JOURNAL? Only $1.00 will pay for it regularly to *new* subscribers from now to Jan. 1, 1894! And, besides, *you* can have Newman's book on "Bees and Honey" as a premium, for sending us two new subscribers. Don't neglect your neighbor! See page 749.

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas

WANTED.—To introduce in every home—"New Dish Washer." Very simple. No complications. Does its work quickly, easily, effectively. Saves labor, and is CHEAP. Special inducements for 30 days. Address with stamp 24E Mrs. Minnie W. Gordon, Bloomfield, Fla.

Convention Notices.

THE NORTH AMERICAN Bee-Keepers' Association will hold its annual Convention in Washington, D. C., Dec. 27, 28, 29, 1892.
Flint, Mich. W. Z. HUTCHINSON, Sec.

IOWA.—The Eastern Iowa Bee-Keepers' Association will meet at Maquoketa, Iowa, in the City Hall, on Dec. 14th and 15th, 1892. All are invited. FRANK COVERDALE, Sec.
Welton, Iowa.

COLORADO.—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 16 and 17, 1893. Election of officers and other important business will come before the meeting.
Littleton, Colo. H. KNIGHT, Sec.

MINNESOTA—.The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan. 12, 13 and 14, 1893. The Thursday meeting will probably be a union meeting with the Horticultural Society which meets at the same place, commencing on Tuesday. A. K. COOPER, Sec.
Winona, Minn.

VERMONT.—The eighteenth annual meeting of the Vermont Bee-Keepers' Association will be held in the city of Burlington, Vt., on Dec. 28 and 29, 1892. Every one interested in apiculture is earnestly desired to be present. As a bee-keepers' association, we know no State lines, but will gladly welcome all that come. Programs will be published soon. Holiday rates on the railroads.
Barre, Vt. H. W. SCOTT, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected; President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

Be Sure to read offer on page 749.

"The Winter Problem in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apiary. Price, postpaid, 50 cents; or given as a premium for getting one new subscriber to the BEE JOURNAL for a year. Clubbed with the BEE JOURNAL one year for $1.30. Send to us for a copy.

Have You Read page 749 yet?

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium? Read the offer on page 711.

Advertisements.

BUY your **HIVES** where lumber is cheapest. That's at LeSueur, Minn. Catlg. free.
24Atf **F. C. ERKEL.**
Mention the American Bee Journal.

Don't Purchase a **SELF-HIVER** 'till you've read about the **Perfection** in our 18-page Circular.—Sent free. Address,
HENRY ALLEY, Wenham, Mass.
24Atf *Mention the American Bee Journal.*

"A Year Among the Bees"

—BEING—

A talk about some of the Implements, Plans and Practices of a Bee-Keeper of 25 years' experience, who has for 8 years made the Production of Honey his Exclusive Business.

By Dr. C. C. MILLER.

Its descriptions commence with the necessary work in the spring, and run through the entire Year, detailing the methods of doing, as well as telling when to do, all that should be done in the apiary. It contains 114 pages and is nicely bound in cloth.

Price, 50 cents, by Mail

Or we will Club it with the BEE JOURNAL for one year, for $1.35.

GEORGE W. YORK & CO.,
199 Randolph St., - CHICAGO, ILLS.

Bee-Keepers' Supplies. BEFORE placing your order for Supplies, Send for our Illustrated **CATALOGUE.** We are making the best goods at lowest prices.

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Mention the American Bee Journal

WANTED ONE BOY & ONE GIRL in every city, town and village to learn to ride a new improved and very handsome Safety Bicycle. We furnish the Bicycle free, on very easy conditions, and it costs you no money. If you want a bicycle without buying it or paying one cent for it send your name and address at once to Western Pearl Co., 308 Dearborn St., Chicago, Ill.

ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

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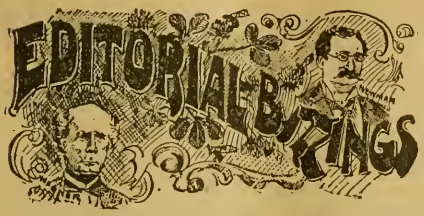


Rev. E. T. Abbott, one of our correspondents, and dealer in bee-supplies in St. Joseph, Mo., goes to Jacksonville, Fla., in a few days, to remain about six months. Mrs. Abbott, who is a regular business woman, will have charge of their bee-supply interests at "St. Joe."

Mrs. Atchley, in a letter to us dated at Greenville, Tex., on Dec. 6th, says:

It is warm and pleasant here, and bees are working on apple-bloom and other flowers, and gathering some honey.

That sounds almost nice enough to make the reader *feel* "pleasant." Why, here in the North the bees are housed up for winter, and in some places blizzards have been "in style." What a large country is ours. It will suit everybody — excepting those who won't be pleased, any way.

LATER.—Mrs. Atchley informs us that her address will hereafter be Greenville, Tex. She had expected to move to Beeville, Tex., but has now postponed it.

What About Adulteration?—This number of the BEE JOURNAL contains several articles on the subject of honey adulteration, and, with what is presented in these editorial columns, makes this a very interesting issue. Please read all that is written on this important matter, and then see what you think about it.

As Bro. Root, in last *Gleanings*, makes a number of excellent suggestions relating to this whole subject, we reproduce them for the benefit of our readers. Here is the editorial referred to:

Adulterating Honey—Is it Practiced? If so, What Shall we do About It?

In the AMERICAN BEE JOURNAL for Nov. 17th, Prof. Cook has an able article in which he shows the extent to which honey is adulterated. As chemists are now able to successfully detect all sorts of honey mixtures, he urges that our States adopt good laws, such as, for instance, Michigan has. In his opinion, the National Bee-Keepers' Union is just the organization to enforce them, because good laws will not enforce themselves.

Under the able management of Mr. Newman, and with a modified Constitution, he thinks the Union could make things lively. In the next AMERICAN BEE JOURNAL Mr. Newman replies. So far, he says, not one of the members of the Union has asked to have the organization reorganized.

Right here may we suggest that people generally will not express themselves unless given an opportunity to vote. If the General Manager would state, in a circular letter, the desirability of having the Constitution changed, and submit to

them a voting blank, which they could return, we feel sure that every one would ask for the change.

But to return: The present General Manager, on account of ill-health, feels that he is unable to assume such added responsibility. It would need a younger man, he thinks—one full of vigor and push. Mr. Newman is *the* man, but if he is not available, we would recommend some bee-keeper who is also a lawyer and legislator—such a person, for instance, as R. L. Taylor.

With a Bee-Keepers' Union of 5,000 members, its chief could be salaried, and yet have necessary funds for carrying on the work of securing evidence, and arresting and prosecuting the guilty parties. But how about the membership? We feel that a very large number of our own subscribers (and this will be true of the constituency of other bee-papers) would fill a membership blank and plank down a dollar if a return envelope were placed before them.

The reason, we think, why there has not been a more hearty response before, is because we have not yet given those who are *diffident* about writing, an opportunity to express themselves. At any rate, it would not cost a great deal to try the experiment.

Out of our over ten thousand paid-up subscribers, to every one of whom we would submit blanks, we feel pretty sure we could get pretty close on to 2,000 who would become members of that organization.

The present Union does not offer enough substantial benefits to make the mass of bee-keepers feel the *necessity* of enrolling their names. But a Union that could not only defend them against disagreeable neighbors, but could also ferret out and carry on successfully prosecutions against adulterators—in fact, champion the rights of bee-keepers in all things, would offer sufficient inducements to call out a large support from bee-keepers.

We should like to hear from our prominent contributors, for next issue, as well as from the General Manager through the AMERICAN BEE JOURNAL. There is yet time enough for us to get the matter in such shape that it can be presented before the national association at Washington.

It is very generous in Bro. Root to offer to "submit" blanks to the subscribers to *Gleanings*, but he will find it will not pay, unless he has much better results than the BEE JOURNAL has had after devoting thousands of dollars worth of space to advertising the Bee-Keepers' Union, and then has only secured about 500 members. However, we should be much pleased to see the experiment tried.

General Manager Newman sent us the following letter for publication, after having read the foregoing from Bro. Root:

I have carefully read the editorial on page 897 of *Gleanings* for Dec. 1st, and as therein requested, I will offer a few remarks on the matters at issue.

Mr. Root desires me to "state in a circular letter, the desirability of having the Constitution changed, and submit to the members of the National Bee-Keepers' Union a Voting Blank, with return printed envelope," etc.

The advocates of the measure should certainly be the ones to show the "desirability of the change," and if Mr. Root, or any other one of its advocates, will undertake that duty, I will quote it in my forthcoming Annual Report, and call for a vote on the subject. As I have never *advocated* the measure, it would be quite out of place for me to champion the measure before the members of the Union. I will act in an impartial manner, and refrain from the discussion, simply to get the full, free and unbiased vote of the members of the Union.

I hope to have my 8th Annual Report ready about Dec. 20th, and then the whole thing can in it be laid before the membership, and the matters to be voted upon can be included in the regular Voting Blank for Officers. This can be done without extra expense to the Union, and will settle the whole question in a legitimate and authorized manner.

Bro. Root very generously offers to send out 10,000 Circulars, Voting Blanks, and return envelopes to his subscribers. Why, that will cost $100 for postage alone, besides printing and stationery. Why not request all the bee-periodicals to devote one advertising page to the Union, and print thereon a Circular and Voting Blank? Then ask the subscribers to fill up the Voting Blank and enclose with a dollar for annual dues, to the Manager. That will save hundreds of dollars, and still get at all the intelligent and progressive bee-keepers of America at one and the same time.

If this meets the views of the advocates of the measure, I will get up a Voting Blank, and send an electrotype of it to all the bee-papers, for publication as suggested.

I will send this letter to every bee-paper, and endeavor to get the views of the editors, and if the proposition is agreed to, will send the electrotype in time for the first issues of each periodical in 1893.

I will also do anything that seems wise, which may be suggested by other persons, and I hereby request any one who has suggestions or ideas on this subject to offer, to send them to me at once—for "in the multitude of counsel there is wisdom," said an ancient sage.

THOMAS G. NEWMAN.

Chicago, Ills., Dec. 9, 1892.

The AMERICAN BEE JOURNAL is ready to co-operate most heartily and forcibly in whatever scheme is decided upon (except that of "regulation" suggested on page 787), to endeavor to stop the adulteration of honey or any other food. We await with interest the action of the members of the Bee-Keepers' Union.

Mr. W. R. Graham, of Greenville, Tex., has been appointed to take charge of the Texas State bee-exhibit at the World's Fair next year. This is a wise selection, and our friend Graham will fill the position with credit to himself and honor to his great State. Mrs. Atchley will superintend his apiaries during his absence, which will be a large part of next year. He is fortunate in being able to secure the services of such an energetic and faithful apiarist.

Mr. C. A. Hatch, of Ithaca, Wis., we learn from the *Wisconsin Farmer*, has been engaged to lecture before the State Farmers' Institute in Wisconsin until April, 1893. He will probably talk on bees and sheep, as he is well posted in these industries. It will pay all who can, to hear Mr. Hatch.

"Bees and Honey"—see page 781.

The North American.—As announced last week, we publish below the programme, and other information concerning the meeting, of the North American Bee-Keepers' Association in Washington, D. C., on the 27th, 28th, and 29th of this month. As expected, Bro. Hutchinson has arranged a most excellent "feast" for those who attend, and are thus able to "partake."

Read the following announcement of particulars all through carefully, and then see if *you* cannot in some way "get there," too!

The North American Bee-Keepers' Convention.

The North American Bee-Keepers' Association will hold its 23rd annual convention Dec. 27th, 28th and 29th, at the Randall House, corner of Pennsylvania Avenue and 15th Street, Washington, D. C.

This hotel is new, handsomely furnished, and first-class in all its appointments, and is the most centrally and beautifully located of any hotel in Washington. The regular rates are $3.00 a day, but to those attending the convention, they will be only $2.50. Besides this, if only 15 members stop at the house, a hall in the hotel will be furnised *free*. Otherwise, the charge for the hall will be $5.00 per day. Of course there are other cheaper hotels to which those who choose can go. Rates as low as $1.75 can be secured. Or a room at $1.00 a day can be obtained, and meals taken upon the European plan.

The convention will be held when all railroads will give a round-trip for the price of one and one-third fare. It may be well to explain, however, that these rates are given only for *local* traffic. In other words, a person who has to pass over more than one road cannot buy a *through* ticket and take advantage of the reduced rates. In order to take advantage of the reduced rates he will be obliged to first buy a round-trip ticket over his own road; then upon reaching the next road, buy one over that, and so on.

It may be possible that a limited return ticket could be bought nearly as cheaply as to pay these locally reduced holiday rates. Let all consult their ticket agents in regard to this before buying their tickets.

The trunk lines would have granted

reduced rates (one and one-third fare), but there must be 100 persons present. Should there be less than 100 present holding railroad certificates, the reduced rate would be withheld. Should we adopt the certificate plan, and then the attendance be less than 100, there would be bitter disappointment and loss, as, had the members not *expected* to return at one-third fare upon presentation of their certificates, they would have taken advantage of other reductions. As it now is, those living on roads leading into Washington *direct* will be all right, while those coming over more than one road can manage as suggested.

PROGRAMME.

First Day—Tuesday, Dec. 27, Afternoon Session—2:00 P. M.

Payment of annual dues; reception of new members, and distribution of badges.

President's Address—Eugene Secor, Forest City, Iowa.

Discussion.

Grading Honey—Dr. C. C. Miller, Marengo, Ills.

Discussion.

Question-box.

Evening Session—7:30 P. M.

Self-hivers—E. R. Root, Medina, O.

Discussion.

Question-box.

Second Day—Wednesday. Dec. 28, Morning Session—9:30 A. M.

Detecting the Adulteration of Honey—Prof. A. J. Cook, Agricultural College, Mich.

Discusssion. (Prof. H. W. Wiley, United States Chemist, is expected to be present and join in the discussion.)

Varieties of Bees and their Characteristics—Frank Benton, Washington, D.C.

Discussion.

Question-box.

Afternoon Session—2:30 P. M.

What the Department of Agriculture Ought to Do for Apiculture—P. H. Elwood, Starkville, N. Y.

What the Department of Agriculture Has Done and Can Do for Apiculture—C. V. Riley, Government Entomologist, Washington, D. C.

Discussion.

Question-box.

Evening Session—7:30 P. M.

Shall the Scope of the Bee-Keepers' Union be Broadened ?—Thomas G. Newman, Chicago, Ills.

Discussion.

Question-box.

Third Day—Thursday, Dec. 29, Morning Session.

Selection of place for holding next meeting.

Election of Officers.

Reports of Committees.

Completion of Unfinished Business.

Question-box.

Adjournment.

Just a word in regard to the fewness of the topics: Some of the topics are of unusual importance, and deserve most thorough discussion. It is very unsatisfactory to have an important discussion in full blast cut off short, and perhaps referred to a committee in order to give room to the next topic. A full convention can bring out all the points much more fully than a few men in a committee room. One suggestion leads to another, and "in the multitude of counselors there is wisdom."

The questions in the question-box (often of importance) are frequently referred to a committee to be answered. A discussion in full convention is more likely to bring out the truth.

If any one has any topic or question that he would like discussed, and will not be present to ask for its discussion, let him write to me at once, and I will see that the matter is brought to the notice of the convention. The discussion of a topic often leads to another which would be very desirable to discuss, but lack of time prevents. It is believed that the above programme will allow a reasonable time for the discussion of these interesting side-questions that are continually springing up.

W. Z. HUTCHINSON, *Sec.*

Wisconsin Bee-Keepers.—We have received the following letter from Dr. Vance, which he desires all bee-keepers in Wisconsin to read, and then write him:

I desire, through the medium of the AMERICAN BEE JOURNAL, to ask its Wisconsin patrons and readers, who contemplate making an exhibit of honey at the World's Columbian Exposition, to write to the Corresponding Secretary of the Wisconsin State Bee-Keepers' Association—J. W. Vance, 208 S. Fairchild Street, Madison, Wis.—signifying their intention. Those who do so will receive by return mail important information upon the subject. Please write to the Secretary at once.

J. W. VANCE, *Cor. Sec.*

To Regulate Adulteration!—The latest and most novel idea in regard to the nefarious adulteration business is the suggestion that it now be *regulated!* Just read the following sentence, which we take from one of our agricultural exchanges:

This adulteration business is a great evil, and robbery of the people, and it is high time something was done to regulate it.

It's a "great evil and robbery of the people" is it? Then *regulate* it! Whew! *Regulate robbery!* One would think that some mummy had arisen especially to write that sentence.

No, sir! bee-keepers don't believe in regulating the robbery—*adulteration!* Not much! They have too good sense to have any share in such a suggestion. What they want is to *prohibit* the robbery by putting the robber where he cannot steal from the people. This country has tried "regulation" of some other "great evils"—evils greater than that of adulteration—and the more we have tried to "regulate," the stronger and more powerful and defiant have the evils grown.

Chicago would have had a fine time trying to "regulate" her anarchists a few years ago! But she knew a thing or two about such evils, and just *hung* some of them, and the balance "regulated" themselves accordingly, without any further notice. In this enlightened day of our civilization, if any one has nothing better than "regulation" of an evil to offer, he would better not open his mouth, unless he wishes to be classed with the party who "said in his heart there is no God."

A Correction.—In Mr. Fitz Hart's letter on page 733, read, "he has discovered that there is no foul brood virus *in pure honey whilst* in comb-cells," instead of the way it was printed, and you will have it the way Mr. Fitz Hart intended to write it.

"Bees and Honey"—page 781.

CONDUCTED BY

Mrs. Jennie Atchley,

GREENVILLE, TEXAS.

Criminality of Food Adulteration.

I have always believed that a man who makes and sells spurious honey or any other food, for that matter, is guilty of criminal disregard of the lives of others. The manufacturer of adulterated foods, destroying human lives (which it certainly does, by degrees, at least), should almost be convicted of murder. Of all species of selfishness, that which prompts a person to adulterate food is a menace to the lives of men, women and children, merely because it pleases his fancy to do so, to catch the spoils of honest people. Such an one will do anything to satisfy his own greed for money. I know nothing more gross and inexcusable.

The country needs some stringent laws on this point. A man should no more be allowed to kill people by inches, than he would be to dish them out strychnine at once. So here is my dollar toward the good work. I do not feel that I can afford it, but will do so for a good cause like this.

JENNIE ATCHLEY.

Kinds of Smoke and Smokers.

First, I do not like poison smoke of any kind, such as tobacco, kerosene-oiled rags, etc. I do not think it necessary, in the handling of bees, to use such poisons. Plain, rotten elm-wood, rags, or, in fact, any kind of fuel that will make good smoke, is sufficient for me, even for Cyprian bees.

And I can use any kind of a smoker that I have ever tried, and know no difference in my work. But, as to my preference, I take a "Bingham." Though I do not think the *kind* of smoker is essential. But get you a good smoker, and go ahead.

Feeder Floats—Honey from the Rocks.

On page 635, G. M. Doolittle advises the use of shavings or cobs for floats in milk-pan feeders. I once lost several quarts of feed by using *oak* shavings.

I have eaten honey taken from the rocks in Old Mexico. If we can get Mr. Aten to give us the size of entrances, number and distance from each other; the distance that a pole or stick probe can be forced into the openings; the height of cliff above the entrances; the kind of rock, and any other information concerning the inaccessibility of the bee-caves on the Colorado, perhaps we may arrange to come and assist in extracting the sweets next summer, as we know how the thing is done.

GEORGE MOTT, M. D.

Spurger, Texas.

Experience with Bees in Two States.

I began the season in New Hampshire on April 4th, with 3 colonies of blacks, No. 1, the weakest of the 3, I transferred just at the commencement of fruit-bloom, and they gave me ten 1-pound sections well filled, and five partly filled. In August I found them queenless, and they promptly reared another queen, when a frame of brood and eggs were given them.

No. 2 I tiered up on top of the box-hive with 8-frame dovetailed hive, and when the frames were filled with comb, and the queen had gone to "house-keeping" upstairs, I placed her carefully on the stand below, took the box-hive into the house, drummed out the bees, and let them fly back to the old stand. I transferred the brood and the straight worker comb to another dovetailed hive-story, and put it back on top of the first-mentioned dovetailed hive. The sections with starters, on top of this double story hive, were not worked, though they might have been in a better season. The frames were all filled solid.

Number 3 was tiered up the same way. When the frames were filled, I put the queen below, moved the upper story to a new stand, and gave them an Italian queen. The Italian queen bred up so rapidly that in August I drew four heavy frames of brood from her colony, and gave them another Italian queen, and had them all strong enough to cover 8 frames, each with plenty of stores by Sept. 15th.

I then packed the whole in cases and came to Florida, where I began practice the winter before. I found 3 colonies alive out of 4. Thieves had broken into the yard and did some damage. The hives were full of bees, but empty of honey.

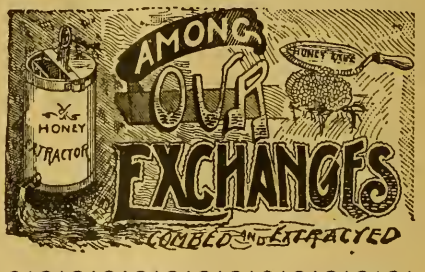
The fall flow began early in October, and continued into November. The hives were all filled and sealed early in November. I purchased 5 colonies that were hived in dry-goods boxes, which I am transferring, and extracting the honey at the same time.

Just now I am in the midst of transferring and extracting. I am getting from 20 to 50 pounds per colony.

I have never tried but one kind of hive, and that takes the Langstroth frame. I have tried many styles of frames, and prefer the Hoffman first, last and all the time.

E. B. WHIPPLE.

Grasmere, Fla., Nov. 18, 1892.



Neighborhood Visits in Winter.

Let every bee-keeper visit his neighbor bee-keepers. Get up neighborhood visits. Take your lunch baskets, and your wives, and go to neighbor A's this month, and then to Bro. B's next month, and so on. No need of talking bees all the time, but enough to know how each one is doing. Then have a general good visit. It will do you all good. The long winter is now here. Don't be a clam and sit down by the fire all the time, but make the winter a time for improvement mentally. It will fit you for better work when spring comes. Benefit others, and the reflex action will benefit you.

As the winter season is now before us, we would urge our readers to form clubs or societies for the mutual exchange of ideas, whereby greater success may be attained on the farm, in the garden, orchard or apiary. Farmers, as a class, are somewhat isolated, and their families do not enjoy the privilege of meetings, socials and libraries as those living

in the towns, but as the long winter evenings come on, they can meet around for neighborhood visits, and by systematic efforts can have select readings from standard authors on all subjects interesting to farmers, followed by the personal practice of those present.

One line of work may be taken up one evening, and another the next time, which would prove instructive to all attending. Try it. — *Nebraska Bee-Keeper.*

Wet Earth a Bee-Sting Cure.

Although wet earth has long been known as a cure for bee and wasp stings, very few persons seem to be aware of its value as such. The following example may interest some of the readers :

Four summers ago, at a picnic in the country, one of my boys found a wasp's nest, and must needs amuse himself pelting it with stones, resulting in his getting very badly stung in the face. Fortunately, I remembered of having read of the wet-earth cure, and at once daubed his face with some mud from the road, with the happy result that in about 15 or 20 minutes all the painful effects had ceased, and very little swelling remained.

I have since then used this remedy when stung whilst manipulating my bees, and find it infinitely better than spirits of ammonia or other popular remedies, and the best of it is that it is always ready at hand.—J. F. R. AYLEN, in *British Bee Journal.*

Changing Nectar into Ripe Honey.

Our experiments have led us to the conclusion that all honey brought in from the fields by the outside laborers is given to the young bees, taken into their honey-sacs, and if more is gathered than their sacs can contain, it is deposited in the cells until night, and then evaporated down; although the evaporation is going on to some extent during the daytime. At night all hands join, from the outside laborers with jagged wings down to the bees but a day or so old, and the honey or thin sweet is taken into the honey-sac, thrown out on the proboscis, drawn back in again, and so on until by the heat of the hive these small particles of honey are brought to the right consistency, when it is deposited in the cell. In order to do this the bees hang loosely so that when the proboscis is thrown out it shall not hit another bee, or the combs or hive. Many a night have we watched their operations, and by the light of a lamp you can see the little drops of nectar sparkle as it is thrown on the proboscis and drawn in again. When honey is coming in slowly, you will not be likely to see this process. All, doubtless have observed that when bees are getting honey plentifully, it shakes readily from the combs at night, while in the morning before the bees go into the fields, not a particle can be shaken from the combs.—G. M. DOOLITTLE, in *Gleanings.*

Bees and Red Clover.

It is an established fact that bees do not get much honey, not enough "to count," from red clover. If a red clover blossom be examined, it will be found often that some of the flowers on the edge of the tuft are shorter than the others. It is possible that the bee occasionally gets an atom of honey from these dwarfed or imperfect blossoms, because the flower-cup is shallow enough to allow the bees to reach the honey secretion in the bottom.

Some one has said that the bees are seen on red clover late in the season. Of course. When honey is scarce, the bees are looking everywhere for it. If a cast-iron imitation of a clover blossom was set up, probably a bee might be seen on it. "Late in the season" bees may be seen on a great many things that do not yield honey. They may be seen, however, on red clover at all seasons of the year, trying, perhaps, to find some honey in the shallow cups described, but late in the year, more of them may be found on red clover.—JULIA ALLYN.

The Nebraska Bee-Keeper finishes its third volume this month. Its publishers say that on the whole the year has been a prosperous one with them. We are glad to hear this, for we do like to see worthy firms succeed. They expect to add a horticultural department to their paper hereafter. That will open up a large and beautiful field to them, for it is all about

"Flowers, flowers, beautiful flowers,
Emblems of heaven, our bright home above"

Why Not send us one new name, with $1.00, and get Doolittle's book on "Scientific Queen-Rearing" as a premium ? Read the offer on page 711.

Having Divided Colonies as Good as from Swarms.

Query 849.—1. In dividing colonies, is there a way to have the new colony just as good as though it had been a natural swarm, for the production of honey? 2. If so, how may it be accomplished?—Texas.

1. I think not.—JAMES A. GREEN.

1. Y-e-s. 2. L-e-t t-h-e-m s-w-a-r-m. —A. B. MASON.

When the colony is about ready to cast a swarm, remove.—J. M. HAMBAUGH.

1. I don't believe so. I believe we would better let them swarm once if they will or must do so.—A. J. COOK.

A natural swarm works with greater energy with me than any divided colony which I ever made.—G. M. DOOLITTLE.

1. I don't like to divide a colony for honey. 2. Yes, there is a way, but this space is too short to explain.—H. D. CUTTING.

1. *Hardly;* it is very difficult to equal Nature in this respect; although a careful apiarist can come pretty close to it. —MRS. L. HARRISON.

When I take the queen and enough bees from a colony to make a good swarm, I think they do as well as a natural swarm.—R. L. TAYLOR.

1. Yes. 2. Have the colony *strong early*, so as to *divide* early, so it can be *built up early*, and be *early* for the honey-flow.—J. P. H. BROWN.

1. Not as a rule. 2. To attempt to tell why, and how to increase by dividing to the best advantage, is too long a story for this department.—JAMES HEDDON.

1. Yes. 2. Set the old hive to one side, put a new one in its place, and shake down a good swarm of bees, with the old queen, in front of the new hive, and let them go in.—M. MAHIN

There is no way to divide colonies so as to equal natural swarms in producing comb honey; and dividing for increase is only profitable after the main honey-flow is passed.—G. L. TINKER.

1. If every requirement of natural law has been complied with, I see no reason why a divided colony may not be just as good as any. 2. I am not an authority on this point.—EUGENE SECOR.

1. Dividing colonies is an unnatural process but it is a convenience at times. A divided colony will be equal to a natural swarm, as soon as the conditions (after dividing) become the same.—J. E. POND.

1. No; the trouble with dividing is, that the division is usually made weeks before they would swarm naturally, thus greatly interfering with honey-gathering. 2. I don't know.—C. H. DIBBERN.

1. In this locality, yes. 2. Take the queen to the new location, leaving most of the brood at the old stand, and make the division early enough so that both hives will be *full* of bees when the honey-flow comes.—MRS. J. N. HEATER.

Doolittle will probably say that you should divide while they are under the swarming impulse! At other times would make it about even, giving the most honey to the new colony. Never divide a weak colony, or during or following a poor honey-flow.—W. M. BARNUM.

1. Yes. 2. Make up the new colony with combs of brood taken from strong colonies. Take from one to three brood-combs from each old colony. Leave the queens in the old colonies, make the new colony strong, fill the hive full of brood, and give plenty of hatched bees with the brood-combs. As for a queen, let them rear one, or give them one if you have it.—E. FRANCE.

1. Brother Texas, you did not ask your question to suit me. But for me I will say, yes. 2. If we watch closely, we can tell when to do this by the bees starting queen-cells. Then hunt the queen, and hang the frame she is on in the new hive. Now fill the new hive with empty combs or foundation, and put the new hive on the old stand. Now shake into it as many of the bees (and more, too, if you want to) as you think go out with a natural swarm. Move the old hive away on a ne stand. In about three days give it a laying queen, or a cell ready to hatch, and you beat nat-

ural swarming a little.—MRS. JENNIE ATCHLEY.

1. Yes, I can make the new colony just as good as any swarm. 2. Take away half of the brood after shaking off part of the adhering bees. Take the old queen with the brood, etc., and form a new colony of them. Fill up the old brood-nest with empty combs, and give the old colony a young laying queen. The old colony will catch all the flying bees, and the young laying queen will hold the colony together through the longest season, and they will store honey if there is any to be found. The other division will build up to a good colony, and, may be, do more. —G. W. DEMAREE.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

Dec. 27, 28.—Ohio, at Washington, Ohio. Dema Bennett, Sec., Bedford, O.

Dec. 27-29.—North American, at Washington. W. Z. Hutchinson, Sec., Flint, Mich.

Dec. 28, 29.—Vermont, at Burlington, Vt. H. W. Scott, Sec., Barre. Vt.

1893.

Jan. 10-12.—Ontario, at Walkerton, Ont. W. Couse, Sec., Streetsville, Ont.

Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis. Edwin Pike, Pres., Boscobel, Wis.

Jan. 12-14.—Minnesota, at Minneapolis, Minn. A. K. Cooper, Sec., Winona, Minn.

Jan. 16, 17.—Colorado, at Denver, Colo. H. Knight, Sec., Littleton, Colo.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor, Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon, Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

The Ladies' Home Journal, of Philadelphia, Pa., is perhaps the finest monthly home magazine in the world. If ordered before Dec. 20th, 1892, we can club it with the BEE JOURNAL—both Journals for one year—for $1.60, to *either old or new subscribers.* If you are a new subscriber to both JOURNALS, you will receive ours the rest of this year *free;* and the "Ladies' Home Journal" will begin with the January number.

A Living Hive in Winter—Number of Combs.

Written for the American Bee Journal
BY G. M. DOOLITTLE.

Many seem to suppose that it is necessary to confine the bees on as few frames as possible during winter for their safe wintering, basing this supposition on the idea that what is needed is the confining of the heat from the bees in as small a compass as possible; reasoning from this, that the cluster of bees will be kept warm.

The line of argument generally presented is, that ventilation, upper absorbents, a vacant space above and around the bees, etc., ventilates the bees to death, on the principle that warm air seeks the top of a room, and that, unless held there by a tight ceiling, the room will not become nearly so warm as it might otherwise. Now, while there is reason in this, regarding the room, the same cannot be fully applied to the bee-hive, else many colonies of bees would die which now live.

How often it has been given in the bee-papers of the past, that the only colony surviving a hard winter in a large apiary would be one in an old box-hive, which was split from bottom to top, so the snow could blow in on the bees, or that the colony which lived was the one the owner had overlooked, and left all the surplus receptacles on. According to the views expressed by some, these colonies should have died, and those carefully packed, contracted hives should have preserved their bees alive.

I have often noticed that in box-hive apiaries the best colonies of bees in the spring would be those in a tall or large hive that had stores enough in it to crowd the bees down to the bottom-board, and keep them near it all winter; yet according to the theories of some, these colonies should have died or been the poorest. Here the bees were at the

bottom, while, according to some, the heat would have been at the top.

Years ago when I was a boy, father used to put pails on his box-hives in the fall, after he had taken the honey-boxes off. These pails were simply placed on the hives, and the holes leading through the top left open, with no covering of any kind over them; yet such colonies always wintered well. According to theory, the heat should have been in the pails; but I often found, by looking in them on moderate days, that nothing of the kind was there; but on the contrary, the pails were full of frost, which did not melt until the weather became warm enough to melt it from the outside temperature.

Again, I once cut a bee-tree, the combs of which showed that bees had lived in them for years. These combs were six feet long, but the bees had built and filled them, so that during the winter they had always had three feet of air-space above them, yet they did not die. Why is this, if there is truth in this small air-tight-hive principle? Well, I will try very briefly to explain my ideas regarding the matter.

If we hive a natural swarm of bees in a large box, and closely watch them work, we find that they suspend themselves from the top in a compact form, appearing like an inverted cone, which, to all appearances, is nearly motionless, so that it will appear as if the bees were idle; while the fact is, that these apparently idle bees are really the colony proper, and inside this, active work is going on, building comb, etc. This is easily seen by passing a wire suddenly through the cluster horizontally, and letting the lower half drop.

Outside this living hive, or crust of bees, the temperature is often not more than 50°, while just inside they are working wax nicely with from 90° to 95°, as I have found by making careful tests with a thermometer. It would be interesting to follow this living hive further, as it expands until it finally touches the hive; how the combs grow inside, etc., but space forbids, so I will simply note the fact that they will fill the hive, unless it is very large, or the supply of honey fails too early.

Now, as cool weather comes on and storage ceases, this living hive contracts instead of expanding, thus keeping the heat inside of its walls to a sufficient extent for the prosperity of the colony. As it becomes extremely cold, the walls of the living hive become more and more condensed, until the larger part of the bees are engaged in forming this hive; still, I have yet to see a colony which does not have an active force of bees in the center of this living hive, ready to push their way out for an attack, if the box holding the cluster is roughly disturbed. It takes some time for these crust bees to become lively enough to fly; but the inside force can do so at a moment's notice, in any colony I ever experimented with; thus showing that the material enclosing this living hive had little to do with the heat of the cluster, that being controlled by the walls of the living hive.

This living hive is all the while throwing off moisture, and if the box enclosing them is of such shape that this moisture will not collect about the bees, they remain dry, healthy and nice. This is the reason why all kinds of packing are employed to advantage, in my opinion. Instances have been given where colonies of bees have been wintered successfully in a large hive containing less than one-eighth of the comb they would when filled; in fact so little comb that the bees covered all of such comb, except the outer edge, all winter.

After years of contracting the number of combs to suit the size of the cluster, in a part of the hives in my apiary, and leaving a part not so contracted, I have come to the above conclusion; hence the present finds me leaving the same number of combs in the hives in winter as in the summer.

Borodino, N. Y.

Suggestions on Honey-Adulteration from California.

Written for the American Bee Journal

BY GEO. W. BRODBECK.

Mr. Newman's article on page 697 is of much interest. In it he states: "Evidently the Union intends to take no steps for a change so as to take up this work as suggested sometime since, for not even one response to that appeal has been heard."

I, as one, plead guilty, but if it is not too late I desire to add a few words in support of the work suggested.

I do not think the members of the Bee-Keepers' Union have been intentionally lax in response to this subject, but have been disposed to await developments, trusting that some person, or persons, would take the initiative to further this project.

Then, again, Prof. Cook has digested

the subject so thoroughly that we all felt disposed to accept it as conclusive; but if it is necessary for us to inform our fellow bee-keepers that we have our shoulder at the wheel, we hereby do so.

I can assure you the California bee-keepers are very much interested in this subject of "Adulteration," and I know that Mr. Newman and the Bee-Keepers' Union have their hearty support, both financially and otherwise. The Union ought to take the aggressive in this movement, and if its present Constitution and By-Laws are inadequate, why not change them to meet the demands?

I, for one, am not disposed to part with our present management, and, with sufficient remuneration for his labors, I know of no one better fitted for the superintendency of this work than Thomas G. Newman. The work would undoubtedly be more than one person could attend to, consequently with an efficient assistant Mr. Newman could score a lasting victory as the crowning effort of a life-long interest in behalf of the bee-keepers of the United States.

Los Angeles, Calif., Nov. 29, 1892.

Honey Adulteration—Appeal to Bee-Keepers.

Written for the American Bee Journal

BY PROF. C. L. STRICKLAND.

After the reading of the articles by Prof. Cook and Thomas G. Newman, I feel very much like saying "Amen." I feel my inability to add anything more; however, I will say that the adulteration of honey does exist, and has long been going on. I have fears within me, about conquering this dark affair. Nevertheless, I know that it could and should be done, and I feel like saying it *must* be done, or we honey-producers might just as well select a day wherein to stack our bees and hives and say, "Let her go, Gallagher!" Heaven forbid.

But the trouble is with mankind in general that they are too much disposed to hope for, instead of work for, a change. Lamentable fact! Now the secret of the undertaking is how on earth are we going to work on the minds of this vast number of bee-keepers? How arouse them to such a condition that they can see through the fog of the future sufficiently to alarm them? They all should become interested. Why? Because it takes money, in this progressive age, to combat with any foe. There exists at Washington, parties able to prosecute this affair to a bitter end, we only furnishing the capital. We are more able to pay, say $1.00 each, than to have the honey market forever ruined. Producers, we cannot afford to let this monster reach a race-horse speed! "Never."

AN APPEAL TO BEE-BEEPERS.

Bee-keeping friends of America, we are well aware of the fearful condition in the line of manufacturing and offering for sale articles called "honey," and the adulteration of the genuine article, so much so as to almost ruin the markets for the genuine article. How? Why? By the impressions on the minds of the consuming public. The price of honey depends upon the consumption. The consumption depends upon the conditions of the consumers. When the consuming public realizes that the adulteration of honey can no longer exist, and that all the honey offered for sale is pure, and we can convince the masses that honey is not a luxury, but is for all, both tall and wise; and being not only a food, but at the same time a medicine, then, and only then, will we see the greatest consumption of this delicious and God-given article we have ever known.

All thinking bee-keepers, after due reflection, must see that the adulteration and manufacturing and selling of artificial honey is the darkest and most horrible barrier that we producers can have, or ever will have. Now, must this great army of intelligent bee-keepers, right in the face of this ungodly proceeding, only fold their hands in mortal terror, and let it slide over them like an avalanche, and forever hide this glorious, beautiful and intelligent business? It must not be.

Now let us put our shoulder to the wheel—I mean the master wheel (money). Only a dollar each, then a little energy, a little push, and the great machinery of Defense will begin to move, and ere long this fog of oppression would cease to be.

Mark you, while the condition exists, poor prices, poor consumption, poor honey will be the result. "When gone," good prices, good consumption, good honey, good bee-keepers, in good spirits.

Now we must have either, a State or United States law. A United States law would be the best Let us try. We must do something, and that soon. As Mr. Newman is growing old, he yet might have no serious objections to receiving our contributions, and use the same

as might be required. Please let it be known through our blessed bee-papers, how and where to deposit this $1.00, and I believe it will be forthcoming.

It costs time, patience and money to keep up bee-keeping; time and money to produce pure and delicious honey. Then to have parties so nearly destitute of principle as to place on the markets spurious honey, almost ruining us, our market and our honey production—we cannot bear much longer. Let those who pray remember us; let those who hope, do something; let those who won't, fear and tremble. Help! Help! the monster is crawling—soon it will run!

With God, all things are possible; with man, many.

Peabody, Kans.

Bees in California—Their Introduction; Harbison, et als.

Written for the American Bee Journal

BY W. A. PRYAL.

(Continued from page 761.)

Mr. Biglow then proceeds to state that the queens he selected for shipment to California were of Mr. Parsons' stock. He prepared 113 packages with one-third of a colony of common bees in each, into each of which he introduced an Italian queen. He left New York on Nov. 1st, arrived in Aspinwall on the 9th, and remained on the Isthmus ten days. The bees were allowed to fly fine days during this stoppage.

He left Panama on the 20th, and arrived in San Francisco on Dec. 6th, and immediately transferred the hives to the river steamer, and arrived in Sacramento the next day—one month and seven days from New York. Out of the 113 colonies, 111 arrived safely. One of the colonies deserted its hive at Aspinwall.

In closing this long letter, Mr. Biglow says:

"It is my firm conviction, from what I have seen, that they are peculiarly adapted to the Pacific Coast, especially the mountainous regions of California and Oregon, as the climate so nearly resembles that of their native home."

Mr. Harbison closes his chapter on the Italian bee by some remarks upon breeding them, which observations the test of time has proved well founded.

The "Bee-Keepers' Directory" was probably the first American book to give us any definite knowledge on the Italians. By consulting the third edition of Langstroth on the "Hive and Honey-Bee," page 328, I find a foot-note where the learned author briefly records the fact that Mr. Wagner made an attempt in 1855, to import Italian bees, but was unsuccessful. Mr. Langstroth says that Mr. Colvin and himself would attempt to bring some over in the spring in which the edition spoken of was published, viz.: 1859.

In an edition of Mr. Quinby's "Mysteries of Bee-Keeping," which is before me, I find that the author states that "Messrs. Mahan and Parsons were among the first to disseminate the new bees," and that "afterward Mr. Rose, of New York, obtained them direct from their native Alps."

Does not Mr. Biglow, in view of the fact that he made so successful a journey—a distance of some 6,000 miles—and only lost 2 colonies, deserve great praise? We wonder all the more at his success, when we consider that he had to carry his bees through such a hot country as the Isthmus! It seems to me that if he had charge of the first importation brought over from Europe to this country in 1855, he would have landed his queens safe and sound in New York.

MR. HARBISON'S GREAT BEE-WORK.

As I have dwelt at such length upon the portion of the book dealing with the Italian bee, I shall endeavor to be brief with my other observations on Mr. Harbison's work.

From his writings we learn that his father was a bee-keeper in Pennsylvania, and used straw skeps. Since 1843 this distinguished California apiarist followed bee-keeping. He soon tired of straw and box hives, and the unnecessary murder of bees to get their honey.

He had thoroughly tried the several hives patented up to 1848, but found them valueless in many respects. He set about improving the hives then in vogue, and one of his discoveries at this early date was the hive with the inclined bottom-board. Another want which he felt was a hive so arranged that the bees together with their combs and contents could be transferred with safety from one hive to another, either for the purpose of removing, or the formation of artificial colonies. "In other words," as he says, "I wanted control of the combs."

MOVABLE PLATFORM HIVE.

In 1848 he perfected a hive that met these requirements. It consisted of a movable platform within the hive, on which the combs were adjusted, and the

whole so elevated that the bees fastened the combs to the top of the hive. He says that the plan worked well. This hive also had a chamber for surplus honey. His success was such that in 1853 he obtained and marketed upward of 6,300 pounds of honey, which sold at 18 cents per pound. The next year was a bad one for bees in the East. There was a drouth; while his neighbors lost from four-fifths to all their colonies, his loss was but about one-half.

He wanted no more bee-keeping in the East. The new Eldorado seemed to him, from the meagre reports he had received as to its sunny and flower-bespangled valleys and hillsides, as pre-eminently a bee-paradise, so on Oct. 27, 1854, he set out by route for San Francisco, which he reached on the 20th of the following month. After 2½ years in the Golden State, he returned to his old home in the East. It was now that he had an opportunity to read the works of Langstroth and Quinby for the first time. He had heard of their inventions previously. He investigated the claims of the Langstroth hive, and did not approve of it after giving it what he calls "a fair trial."

HARBISON'S APIARIAN INVENTIONS.

On his return to California in 1857, he invented what he termed the "California bee-hive." It was a movable frame-hive, the frames being set at fixed distances, and held in rigid position. This was patented Jan. 2, 1858. Previous to this—Dec. 25, 1857—he had brought out his section honey box or frame, which could be used upon any hive. The "Harbison section," as it has since been known the world over, was the forerunner of all the sections now in use. It is used to a great extent in California to this day, but is being superseded by the one-pound section. The Harbison frame section was about 6 inches square, and held 2 pounds. His hive, too, came into use everywhere, up and down the State, and even yet one may see bee-yards of hundreds of hives of this old pioneer.

HONEY-BEES BROUGHT BY MR. SHELTON.

In Chapter II, he speaks of the introduction of the honey-bee into California. A copy of a letter therein printed shows that they were first brought to the State in March, 1853, by a Mr. Shelton. The advent of bees in the "Land of Gold" was brought about under pecular circumstances. The pioneer bees were poor, lone orphans, as it were, and though they left New York 12 colonies strong, they were abandoned by their unknown owner at Aspinwall. Mr. Shelton brought them to San Francisco all right, but the sand-hills of that city contained no blooming gardens then as it now does, and the poor famished insects dwindled down to a single colony. They were taken to San Jose (well called the "Garden City" of California), and 52 miles from the metropolis. Here they thrived and threw off three swarms the first season. Mr. Shelton, who saved them from doom, was unfortunately killed soon after his arrival by an explosion of a rotten old ferry steamer. In December two of the swarms were sold at auction to settle up his estate, and were bought by Major James W. Patrick, at $105 and $110, respectively.

In November, 1855, Wm. Buck managed to safely land 18 out of 36 colonies he brought from New York. Mr. F. G. Appleton, of San Jose, purchased a half-interest in this last importation. In the fall of 1854, however, Mr. A. bought one colony from Major Patrick.

Messrs. Buck & Appleton now became the big bee-keepers of the State. The former went East again in 1856, and in February following landed 7 out of the 42 colonies he started out with. This firm, from their 28 colonies in 1856, increased to 73, and obtained 400 pounds in boxes, which they sold at from $1.50 to $2.00 per pound. This was probably the first honey of any importance sold in California.

How changed is the product of the bee in that land since those pioneer days! The output of the bee-hive is now reckoned by the carload. While the number of pounds increased, the price correspondingly decreased. Honey only realized about 3 cents per pound at one time about ten years ago. What a difference from the figures obtained for the first crop!

(Concluded next week.)

Adulteration of Honey and the Dishonest Bee-Keeper.

Written for the American Bee Journal

BY IRA REEVES.

I have been very much interested in the articles published from time to time on the adulteration of honey, and with the help of Mr. R. P. Blades (my neighbor), I think we have unraveled the mystery.

From time to time our grocers have

refused to buy our honey at anything like a fair price, and sent away from home and bought honey almost unfit for use. We could not understand how this was, until, by examination, we found it contained only syrup made from brown sugar. Then the next thing was, how was it produced?

We went to work—built feeders, and made the test, feeding about 6 pounds of syrup made from granulated syrup per day. The result was as pretty looking "honey" as you ever put eyes on, and capped over beautifully. This was done after the end of the spring honey-flow.

It was put on exhibition in the drug-store of Reeves & Co., and admired by everybody, and we could readily have sold every pound of it for 15 cents per pound; but we did not, and informed them that it was simply syrup sealed and capped by bees. It was simply syrup, *without* the *taste* of honey to it! Now let me say: The dishonest bee-keeper is the fellow to blame for all this hue and cry of adulterated honey.

I had about 250 pounds of comb honey this year, and have sold all I had to spare at 15 to 20 cents per pound, and right in the face of adulterated honey sold by our grocers. In some instances the adulterated honey has been sold by being represented as "Reeves'" or "Blades'" honey.

A neighbor came to me and said, "What is the matter with your honey?" I said, "Nothing wrong that I know of."

"Well, we have some honey that was bought as your honey, and it is unfit to eat."

The truth was, we had not sold a single pound at that time.

Now how are we to get rid of the dishonest bee-keeper. When you get rid of him, the battle is won.

Let every honey-producer put his private stamp on honey, and guarantee the purity of the same.

Carmi, Ills., Nov. 19, 1892.

The Present Congress and the "Paddock Pure Food Bill."

Written for the American Bee Journal

BY S. H. MALLORY.

I wish to offer one or two suggestions on the subject of adulteration. Messrs. Cook and Newman advocate the enactment of a national law against adulteration of honey, etc. I agree that we should have such a law, not only against honey adulteration, but other farm products as well, and I have been working for years to get such a law. If you have watched the proceedings of Congress, you are probably aware that a bill of that nature was introduced in the Senate during the last session of Congress; was passed by that body, and is now on the calendar of the House, known as the "Paddock Pure Food Bill." If sufficient pressure is brought to bear on our next house of Representatives, by farmers and bee-keepers, it will probably become a law before the close of the next session.

Would it not be well for Prof. Willits, or some one of our apiarian friends at Washington, to look this Bill over, if not already familiar with it, and see if it does not cover the ground, and so prevent the trouble and delay of preparing and introducing a new Bill? It looks to me that way.

As there is considerable opposition to this Bill, in certain quarters, it will be necessary for bee-keepers to make a general move on Congress, and send in such a flood of petitions and personal letters that our friends in the House will be convinced that we mean business. That is the kind of encouragement they need, if we expect to get anything done.

Hon. H. H. Hatch, of Missouri, was chairman of the Committee on Agriculture in the last House, and I think he has been returned, so he will probably have the handling of this Bill, and can do much to forward its passage.

It seem to me that the North American Bee-Keepers' Association, soon to meet in Washington, should take up and thoroughly discuss this question, and take some decisive action in the direction indicated above. This is a subject that affects the pocket of every bee-keeper who produces a pound of honey to sell, and when the time comes for action, there should be a general rally all along the line, to the rescue of our chosen pursuit from the hands of the villainous adulterators.

Decatur, Mich.

Your Neighbor Bee-Keeper—have you asked *him* or *her* to subscribe for the BEE JOURNAL? Only $1.00 will pay for it regularly to *new* subscribers from now to Jan. 1, 1894! And, besides, *you* can have Newman's book on "Bees and Honey" as a premium, for sending us two new subscribers. Don't neglect your neighbor! See page 781.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

They Appreciate the "Bee Journal."

The bee-keepers of California appreciate the AMERICAN BEE JOURNAL very much. We are just now having a grand rain. GEO. W. BRODBECK.

Los Angeles, Calif., Nov. 29, 1892.

Plenty of Honey for Winter.

Our honey crop was very light. I got about an average of 3 pounds per colony, and but very little increase. Bees went into winter quarters with plenty of honey. I have 167 colonies at present.

S. D. COX.

Washington, Ind., Dec. 1, 1892.

Good Honey Crop—Five-Banded Bees.

Our honey crop was good here this season. I had an average of 40 pounds per colony, spring count. One colony gave me 120 pounds alone. The five-banded bees are "hummers." I don't want any more blacks "in mine."

A. J. FREEMAN.

Earleton, Kans., Dec. 1, 1892.

"Where Ignorance is Bliss," Etc.

All who have a few old "gums" (here and in Indiana, Hooppole township, Posey county, and nearly everywhere else there) and box-hives, many of which are not more than 8 inches square, will ridicule a man if he even suggests feeding bees during a starvation summer like the past was, to say nothing about paying for a bee-paper, or buying a few books on apiculture. I have tried it here—fool enough to do so—even after reading what Mr. Alley says about immediately dropping such "chaps."

Occasionally one will buy a fantastical hive, sold by some traveling humbug. Of course, all "sich" hives must have glass boxes, etc., in them. One old fogy has a *double* hive; another has a hive with the top one-third projecting on either side. The top is filled with fantastic boxes. None of the bottoms of these fancy hives have an "open sesame" to them. The idea of movable brood-combs has not entered their "noggins." One fossil has a $15 fantastic, which I haven't seen yet. I shall some day make him a special call. Any professional man will lose caste and patronage if he attempts to tell them anything. A bee-paper is a bigger fraud in their eyes than a street-fakir is in the opinion of the editor of a bee-paper.

There are nine school-houses here on "my beat;" but about as soon as a child is half through the "Three R's," he is taken out of school." There are but few persons, comparatively, who can or will thoroughly master advanced apiculture. I know of none that *can*, having less than a high school education. The great masses are densely ignorant of this subject.

ALBERT SAYLER, M. D.

New Palestine, O., Dec. 5, 1892.

Allegany Co., N. Y., Convention.

At a meeting of the Allegany County Bee-Keepers' Association held at Angelica, N. Y,, on Nov. 28, 1892, it was decided that a simple notice of the same should be sent to the AMERICAN BEE JOURNAL. There were 16 members present (a *very* stormy day), representing six towns, 373 colonies of bees, and over 12,925 pounds of honey. Our next meeting will be the first Thursday in May, at Belmont, N. Y. The secretary is H. L. Dwight, of Friendship, N. Y.

MRS. J. C. HENDERSON,

Angelica, N. Y. *Sec. pro tem.*

Bee-Stings a Cure for Rheumatism.

In a recent issue of the AMERICAN BEE JOURNAL is a request as to whether bee-stings would cure rheumatism or not. I thought I would give some of my experiences. I had been a rheumatic individual for 18 years, not able to work half the time. My brother, Jesse Fairchild, of Chicago, came to visit me in Eastern Kentucky, and found that it was hard for me to keep the wolf from the door. He persuaded me to keep bees, so I bought 3 colonies, and got the book "Bees and Honey," and other bee-literature, and went to work. My first work was to transfer those bees from log

gums to the Langstroth hive. Of course, as I had no veil nor experience with bees, I got lots of stings. My health began to improve. I had good luck in my work with bees. My neighbors soon employed me to help them, so I had lots of work and lots of stings. My health still improved.

The first work I did with bees was about May 15, 1887. That is over five years ago, and I have felt but little rheumatism for three years. I am able to do a day's work now; in fact, I feel like a boy again. Whether the bee-stings cured me or not, I don't know; but one thing I do know, I once was unable to work, and now I am well, and have taken no other rheumatism medicine. I would keep a few colonies of bees, if there was no other pay than their stings.

(Rev.) Miller Fairchild.

Sip, Ky., Nov. 6, 1892.

Are Eight-Frame Hives too Small?

Mr. C. A. Bunch, on page 700, says that "eight-frame hives are too small to hold honey enough to last over until white clover."

I use the eight-frame hive, and I secured 160 pounds of surplus honey in one-pound sections, from 6 young colonies, and when I put them into the cellar, on Nov. 12, they weighed from 55 to 65 pounds each; deducting 18 pounds, the average weight of a hive without the roof, leaves nearly 40 pounds of honey, bees, etc.

I have 11-frame hives, and 3 box-hives in the cellar; 2 of the colonies in box-hives gave me 2 swarms apiece, and now weigh 75 and 94 pounds, respectively. That ought to carry them through.

From my first swarm I got 40 pounds of surplus honey and a swarm; and my second prime swarm 48 pounds, and have enough to winter on. This is 45° north latitude; but we had a very late fall, so the bees kept breeding until November. I hive the swarms on empty frames. John M. Seiler.

Chanhassen, Minn., Nov. 28, 1892.

A Twice-Old Subscriber, Etc.

I cannot well get along without the "old reliable" American Bee Journal. I commenced taking it when published in Washington, D. C., and have taken it the most of the time since. I shall want it as long as I keep bees, but I don't expect to keep bees much longer on account of my age—I am now in my 83rd year.

The last summer was the poorest season that I remember of seeing. Bees did very poorly in this section. Some lost all of their bees. I got only 110 pounds of honey from 65 colonies. I have now 60 colonies in the cellar, in good condition. One of my neighbors obtained only 70 pounds from 110 colonies. Wm. C. Wolcott.

Eldorado, Wis., Dec. 5, 1892.

[With the above letter our dear old friend renewed his subscription and sent us five new subscribers, which he had secured in one day. What a list we would soon have, if every one of our present subscribers would send in even two or three new subscribers with their own renewal this month! And what great improvements we could make in the old Bee Journal, if we had double or triple our present list of subscribers! Would *you* like to see them? Well, just try that offer of "Bees and Honey" on page 781, and see what you can do toward bringing about the fulfilment of the foregoing suggestion.—Ed.]

Bee-Keeping in Maryland, Etc.

The honey crop was short the past season, as far as I know here in Maryland; in fact, we seldom have a very large flow of honey in this vicinity. I began last spring with 26 colonies. I killed one colony that had an unfertile queen, that laid nothing but drone-eggs. This left me 25 colonies. My bees came through the winter in pretty good condition, I think, but most of them had not much honey. I thought I would let them go through without feeding them, except enough to keep them from dying. The spring was cool up to the latter part of May, and when the honey-flow did come, it came so quickly after cool weather was over that it caught my bees weak—but few in numbers—consequently but little honey was gathered—only about 6 pounds per colony, spring count. I had only 4 swarms, all told.

I struck this year for profit and not much expense. I think I will try the feeding plan another spring, to build them up strong, ready for the harvest, if I and the bees live. I use a hive called the "Success bee-hive." I like

it very well—better than any other I have ever used.

I feel interested in the "manufactured honey" mentioned by Mr. George H. Auringer, on page 671, and will be glad to hear the result of the investigation.

WM. H. D. BAKER.

Kempton, Md., Nov. 28, 1892.

A Good Report for 1892.

As the honey season is over, I will report my first year's experience in bee-culture. Three years ago I captured a swarm of bees, and increased to 8 colonies. Last year being a poor season, they gathered nothing except a little honey-dew, so I had to feed the 8 colonies $6.00 worth of sugar syrup, and prepared them for winter by putting a chaff cushion on top of the brood-frames, and packing them on the outside with leaves. They wintered nicely on the summer stands. Last spring being very wet, I fed them $3.00 worth more of sugar syrup, between apple and white clover bloom. I have increased to 13 colonies, and obtained over 700 pounds of comb honey, which I found ready sale for among my neighbors, at 15 cents per pound. I am satisfied, but I want to know if it is what you call a good crop.

JOHN A. BLOCHER.

Shirley, Ills., Nov. 30, 1892.

[Yes, we should think that you ought to be "satisfied." If all had fared as well as you did, there would have been no reason for bee-keepers to complain. We should say that you had a "good crop," though of course in better seasons some are fortunate enough to secure much more.—ED.]

Bee-Keeping in New Mexico, Etc.

My report is as follows: Number of colonies, spring count, 16; increase, 9; total, 25. Number of pounds of first-class comb honey in one-pound sections, 1,229 pounds; second class honey in one pound sections, 250; unfinished and unmarketable sections, 200; total yield for the season, 1,679 pounds.

The market is dull at the following prices: First-class one-pound sections of honey, 12½ cents; second class honey in one-pound sections, 10 cents.

I use the Root T super, and would have no other. I winter my bees on the summer stands, with a six-inch chaff cushion over the brood-chamber. My bees have from 35 to 50 pounds of good honey to winter on. Our honey-flow comes mostly in the latter part of June and the first part of July. There is no foul brood in this immediate vicinity.

Bee-keeping in this sunny clime is pleasant as well as profitable, for the young ladies and school-marms come around to get sweetened up on honey; but they won't be persuaded to take charge of the kitchen and command a regiment of pots, and drive away the loneliness of a bachelor's shanty, but would rather teach school, so as to have a better chance to whip the boys.*

The AMERICAN BEE JOURNAL looks well in its new dress, and is a welcome visitor every week. I could not get along without it.

To-day I delivered to the Ladies' Columbian Committee, of this county, 24 sections of pure alfalfa honey. The notice I received was so short (15 minutes) that I did not have time to properly scrape the sections. It will be in the San Juan county, New Mexico, exhibit, providing it is not stopped on the way to sweeten something or somebody.

G. H. EVERSOLE.

La Plata, New Mex., Nov. 11, 1892.

[*If "honey" won't capture the young ladies, friend Eversole, we don't know what would do it. But may be they think they are "sweet" enough now! We never thought that a good bee-keeper would have any difficulty in persuading a young lady to share his home and honey. The only suggestion we can offer is the old admonition—"If you don't at first succeed, try, try again," etc.—ED.]

Rheumatism and Bee-Stings—Report.

I noticed on page 562 an account taken from the *British Bee Journal* in regard to bee-stings and rheumatism, and as my father's experience may be of interest to some, I will give it.

Three years ago this winter my father had an attack of *La Grippe*, which left him with severe pain in the temple and forehead, so that he could not rest night or day for about four months. One warm day in early spring, when the bees were taking a cleansing flight, he was walking around among them, when one stung him about an inch above the outer corner of the left eye, in exactly the place where the pain was most severe. As he is accustomed to being

stung occasionally, he thought nothing more about it until in a very short time he noticed that the pain had disappeared. That was three years ago, and he has had no trouble with rheumatism or pain in his head since then.

The honey crop, the past season, was light in this part of the State. Golden-rod and some other fall flowers yielded an abundance of honey, so that the bees have gone into winter quarters in better condition than for some years.

M. A. DOOLITTLE.

Bethlehem, Conn., Dec. 3, 1892.

The World's Fair Women "Souvenir" is the daintiest and prettiest book issued in connection with the World's Fair. It is by Josephine D. Hill—a noted society lady of the West—and contains superb full-page portraits and sketches of 31 of the World's Fair women and wives of prominent officials connected with the great Fair. It is printed on enameled paper, with half-tone engravings, and is bound in cloth, and also in black, red, white or blue leatherette, gold lettered. Just the thing for a Christmas gift to your friend. We will send it postpaid for $1.00, or give it for *two* new subscribers to the BEE JOURNAL for a year, at $1.00 each. Every woman will want a copy of this book, we feel sure.

Excellent Weekly.—The splendid *Maryland Farmer*, for November, published at 213 N. Calvert St., Baltimore, Md., contained the following kindly notice of the AMERICAN BEE JOURNAL:

We record the fact that this old and excellent weekly journal has changed hands, and comes to us in a new dress. It has always been a paper full of enterprize, and we wish its present proprietors abundant success.

There is Not One Person but what can secure at least *two* new subscribers to the BEE JOURNAL, and get the splendid Premium offered on page 781. Try it.

AMERICAN BEE JOURNAL

ESTABLISHED IN 1861 — OLDEST BEE PAPER IN AMERICA

PUBLISHED WEEKLY BY

GEORGE W. YORK & CO.,

At One Dollar a Year,

199 RANDOLPH ST., CHICAGO, ILLS.

TO CORRESPONDENTS.

The Bee Journal is sent to subscribers until an order is received by the publishers for its discontinuance, and all arrearages are paid.

A Sample Copy of the BEE JOURNAL will be sent FREE upon application.

How to Send Money.—Remit by Express, Post-Office Money Order, or Bank Draft on New York or Chicago. If none of these can be had, Register your Letter, affixing Stamps both for postage and registry, and take a receipt for it. Money sent thus, IS AT OUR RISK; otherwise it is not. Do not send Checks on Local Banks—we have to pay 25 cents each, to get them cashed.

Never Send Silver in letters. It will wear holes in the envelope, or may be stolen.

Make all Money Orders Payable at Chicago, Ill.—not at any sub-station of Chicago.

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Subscription Credits.—The receipt for money sent us will be given on the address-label of every paper. The subscription is paid to the END OF THE MONTH indicated.

Do not Write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Emerson Binders, made especially for the AMERICAN BEE JOURNAL, are convenient for preserving each weekly Number, as fast as received. They will be sent, post-paid, for 50 cts. each. They cannot be sent by mail to Canada.

Lost Numbers.—We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails, we will replace them if notified before all the edition is exhausted.

Always State the Post-Office to which your paper is addressed, when writing to us.

Special Notices.

The Date on the wrapper-label of this paper indicates the *end* of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription up to the *end* of December, 1893:

Wallace Porter Dec93
Suffield, Portage co, Ohio

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, December 10th, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c,, according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Considerable honey coming in. Fancy stock for Holidays will bring fancy price. White comb now selling 16@17 cts., with dull market owing to mild weather. Extracted holds firm 8@9c. for fancy; 7c. for dark.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand is good for honey, with scant supply of all kinds. Extracted brings 6@8c., and comb sells at 14@16c. for best white. Although honey is scarce, there is no demand for dark comb.
Beeswax—Demand good, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Comb honey is selling slow, very much slower than we like to have it, and it is our experience that when we start honey in at a high price, it sells hard right through the season. We quote our market nominally at 17@18c. for best white honey, 1-lb. combs. Extracted, 8@9c.
Beeswax—None on hand. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—White comb is arriving in sufficient quantities to supply the demand which is gradually slackening off. We quote: Fancy white 1-lbs. 15@16c.; 2-lbs. 12@13c. Fair white 1-lbs. 12@13c.; 2-lbs. 11c. More buckwheat honey on the market than the demand reqires and in order to effect sales—prices have to be shaded. 1-lbs. glassed or in paper boxes, 10@10½c.; unglassed, 9@10c; 2-lbs. 9c. Extracted, white clover and basswood, 8@8½c. Buckwheat, 6@6½c. Southern, 70@75c. per gallon.
Beeswax—Dull at 25@26c. H. B. & S.

ALBANY, N. Y.—Honey market some quicter and prices some easier. White clover, 15@17c.: mixed, 14@15c.; dark, 10@11c. Extracted, white, 8@8½c.; mixed, 7@7½c.; dark 7c. Stocks light of both comb and extracted.
Beeswax, 27@28c. H. R. W.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT, 161 South Water Street.
J. A. LAMON. 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer it on page 711, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you as a present.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

Great Premium on page 781!

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line,** for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
6Atf Wallaceburg, Arkansas

Convention Notices.

THE NORTH AMERICAN Bee-Keepers' Association will hold its annual Convention in Washington, D. C., Dec. 27, 28, 29, 1892.
Flint, Mich. W. Z. HUTCHINSON, Sec.

OHIO.—The Ohio State Bee-Keepers' annual convention will be held in the Parlors of the Cherry Hotel, at Washington, Fayette Co., Ohio, on Dec. 27-28, 1892. Further particulars later. DEMA BENNETT, Sec.
Bedford, Ohio.

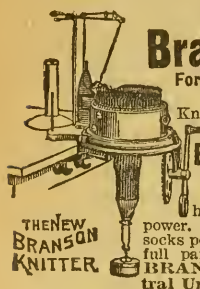
ONTARIO, CAN.—The annual meeting of the Ontario Bee-Keepers' Association will be held in Walkerton, Ont., on Jan. 10, 11 and 12th, 1893. All interested in bee-keeping are cordially invited to be present.
Streetsville, Ont. W. COUSE, Sec.

COLORADO.—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 16 and 17, 1893. Election of officers and other important business will come before the meeting.
Littleton, Colo. H. KNIGHT, Sec.

MINNESOTA—.The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan. 12, 13 and 14, 1893. The Thursday meeting will probably be a union meeting with the Horticuitural Society which meets at the same place, commencing on Tuesday. A. K. COOPER, Sec.
Winona, Minn.

VERMONT.—The eighteenth annual meeting of the Vermont Bee-Keepers' Assocciation will be held in the city of Burlington, Vt., on Dec. 28 and 29, 1892. Every one interested in apiculture is earnestly desired to be present. As a bee-keepers' association, we know no State lines, but will gladly welcome all that come. Programs will be published soon. Holiday rates on the railroads.
Barre, Vt. H. W. SCOTT, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.



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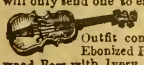

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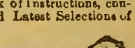

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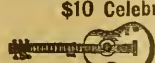

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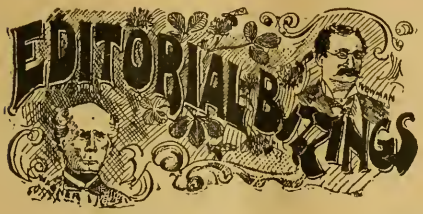
THE AMERICAN BEE JOURNAL

OLDEST BEE PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., DECEMBER 22, 1892. NO. 26.



A Merry Christmas to All the readers of the AMERICAN BEE JOURNAL is our sincerest wish at this time. Before another number reaches you, that happiest day of the year will have come and gone. Again we wish you—

A MERRY CHRISTMAS.

Change of Ohio Meeting.—Secretary Miss Dema Bennett, of Bedford, Onio, writes us as follows:

The date of the Ohio convention has been changed so as not to conflict with the North American, to Jan. 2 and 3. I hope that some of the Western bee-keepers will buy their tickets to Columbus, and from there to Pittsburgh, if they wish to go as A. I. Root suggested in *Gleanings*, and on their return from Washington stop off at Columbus, O., and run down to our meeting at Washington C. H., which is only 39 miles below Columbus. It is only 39 miles further from Chicago *via* Columbus, O., to Pittsburgh than it is by the Fort Wayne route, both of which are the Pennsylvania railway lines, although the former is operated by the P. C. C. & St. L. Railway Company.

DEMA BENNETT, *Sec.*

A $1,000 Poem.—The following poem brought its author $1,000, being the sum offered by a syndicate of Western editors for the best appeal poem to subscribers to pay up their subscriptions. The prize was won by the editor of the *Rocky Mountain Celt*, and this is the "valuable" poem:

Lives of poor men oft remind us
Honest men won't stand a chance;
The more we work, there grows behind us
Bigger patches on our pants.

On our pants, once new and glossy,
Now are stripes of different hue,
All because subscribers linger,
And won't pay us what is due.

Then let us all be up and doing,
Send your mite, however small,
Or when the snow of winter strikes us,
We shall have no pants at all.

Although the above may not truthfully represent the condition of *our* "pants," yet those three stanzas will serve to remind several of the BEE JOURNAL readers of something that they had forgotten. Is your subscription paid up? Look at the pink label on the wrapper, and see what it says.

By the way, **no blue mark** will be placed on the BEE JOURNAL of those subscribers who have paid to the end of this month and are marked "Dec92." Please make a note of this, and don't fail to renew *at once* for 1893. We are planning some grand features for the BEE JOURNAL next year. You can't afford to miss them, either. Send us the dollar—we'll do the rest.

The Bee-Keepers' Union has done grand work for the pursuit of bee-keeping. Mrs. L. Harrison, in the *Orange Judd Farmer*, said this about the Union a short time since:

The Bee-Keepers' Union has done much to cause our industry to be respected and placed upon a firm foundation. It has taught evil disposed persons and corporations that the production of honey is a legitimate business. Its able Manager, Mr. Thomas G. Newman, of Chicago, is always on the watch-tower, scanning the horizon, and on the least appearance of danger is on the alert with well-directed guns. He has caused the enemy to retract and apologize for malicious statements.

It pays to be counted among the defenders of the industry of bee-keeping. Are *you* a member of the "noble band?" If not, send the $1.00 membership fee to the General Manager—Thomas G. Newman, 147 S. Western Ave., Chicago, Ills. He will enroll your name and send you a membership receipt.

Portraits of Bee-Keepers.—Beginning with Jan. 1, 1893, we are arranging to publish a biographical sketch with portrait, of some prominent bee-keeper, in *every issue* of the BEE JOURNAL for the ensuing year. This will make it a veritable historical album, besides containing everything of interest relating to the pursuit of bee-keeping. The old AMERICAN BEE JOURNAL for 1893 promises to be more attractive and valuable than ever. Send us your subscription *now*, so that you may be sure to have the very first number of the new year.

The Second Volume of the *American Bee-Keeper* is completed with the December number. It says that though from a financial point of view their venture has been satisfactory, they "hope that none will conclude that because of this they can surely make a 'pot o' money' by publishing a bee-paper. The chances are, they will have to meet only with a miserable failure; at least this has been the result of numerous trials in the past." Too true.

What is more needed than new bee-papers, is a more extended patronage of the best of the present publications, so that they may be better able to advance the interests of the pursuit. However, we have no reason to complain, judging from the way our list is being lengthened, especially since bee-keepers have just passed through several exceedingly poor honey seasons.

We are indeed thankful for the hearty endorsement our efforts are constantly receiving, in the various expressions brought to us by nearly every mail.

We wish, right here, to thus publicly acknowledge our appreciation of the many kind things said of the BEE JOURNAL and its work, by those who are now renewing their subscriptions for another year, and also for the many fraternal references we have received through all of our valued apiarian exchange papers.

Seven Carloads of bee-supplies for 1893 represent the orders which our friend A. I. Root had on hand Dec. 1st. That's a pretty big start for next season, but not more than could be expected when it is known that he has branch houses, or representatives, to handle his goods in nearly a dozen different parts of the country. It only shows what square dealing may accomplish, and what energy and the application of correct business principles will result in.

We believe that there are more honest dealers in bee-keepers' supplies, in proportion to the number thus engaged, than in any other industry of like extent. "Crooked" folks don't seem to have much to do with bees or their requirements, though there are some who are wicked enough to tamper with the honey product in marketing it.

Read our great offer on page 813.

Mr. and Mrs. Eugene Secor, of Forest City, Iowa, dropped into our office one day last week, on their way to the Washington convention. They will spend a few days visiting old friends in New York State before going to Washington. Being the honored President of the great North American Bee-Keepers' Association, it is important that Mr. Secor should be present at the meeting next week, hence he takes an early start.

We should indeed be glad to attend also, were it possible to leave at this time of the year, but as Bro. A. I. Root expects to be there, and with Bro. Hutchinson as Secretary and reporter for the BEE JOURNAL, the literary part of the pursuit will be ably represented.

The Pure Food Bill, introduced into Congress by Senator Paddock, should be passed at this session of that body. It is expected that the North American Bee-Keepers' Association will do something to help along the matter at its convention next week. Producers of pure honey are much interested in Senator Paddock's Bill. They ought to be, as it will be a great aid in prohibiting the adulteration of honey, as well as other food products.

Italians vs. Blacks.—The editor of the *American Bee-Keeper* says that "there is no doubt of the superiority of the Italians over the black bees, and, in fact, the Carniolan bees are considered by many to be equal, if not superior, to the Italians. Of course the black bees have some characteristics which are better than are found in either Italians or Carniolans, but taking everything into consideration, they are much inferior."

Mr. James Forncrook, of the firm of James Forncrook & Co., Watertown, Wis., called at the BEE JOURNAL office last week. He had been at the Springfield meeting of the Illinois State Bee-Keepers' Association.

Changing the Air in Cellars.—Mr. S. Plummer, of Mannsville, N. Y., asks the following questions about keeping the air in motion in a cellar containing bees:

1. My cellar is quite wet, and the combs in the hives are apt to mold some—too much for the good of the bees. Will it do any good to place a fan wheel in one side of the cellar, and run by a wind-mill, so as to put the air in motion around the cellar? 2. Will it have any bad effect on the bees in the cellar?

S. PLUMMER.

Changing the air in the cellar in any way will be a good thing for the bees, and it is not very likely that there will be any mold where the air is constantly renewed. The only question as to danger is whether so much of a current might be forced on the bees that they would be made uneasy by it, or be made cold by it. For you must remember that when you force a current of air into the cellar, as a general rule in winter, it will send in colder air than that already in the cellar. But bees will stand more cold in pure than in foul air. If your bees are quiet and comfortable, you needn't feel very anxious.

Tomato Honey.—The following recipe for making tomato honey is given by Mrs. Wm. Kenmuir, of McKeesport, Pa., in an exchange:

Select ripe tomatoes, weigh and cut them into slices and put in a kettle. For each pound of tomatoes add the grated rind of one lemon; simmer gently for about 30 minutes, then press through a cloth. Measure the liquor and return to the kettle, and for each pint add one pint of sugar and four tablespoonfuls of lemon juice. Boil until a jelly-like syrup is formed, then put into bottles.

Beet-Sugar, Not Bee-Sugar, was what we meant to say in referring to the forthcoming book by W. A. Pryal, on bee-keeping in California, and the fruit and *beet*-sugar industries, mentioned on page 723. Omitting one letter (t) in the word beet-sugar makes something entirely different, and senseless.

First Weekly Bee-Paper.—In the *Canadian Bee Journal* for Dec. 1st, is a communication from Mr. O. Fitzalwyn Wilkins, of International Bridge, Ont., who says:

A query which very frequently has arisen in my mind, is, why the AMERICAN BEE JOURNAL should have been allowed to substantiate its claim of being the only weekly bee-paper in existence.

If I remember correctly, the *Canadian Bee Journal* was the first weekly publication in the interest of apiculture, which started into being on the continent to which we belong; and why it should have been changed to a bi-monthly, thereby giving the AMERICAN BEE JOURNAL the opportunity of making the claim already spoken of, is "one of those things which no fellow can understand," as Lord Dundreary is credited with having said.....

What say you, friend? Shall the *Canadian Bee Journal* continue to rest quietly under the stigma of having surrendered its birthright?

In the second paragraph of the above, it is well that the correspondent said, "If I remember correctly," for that gives us an opportunity to refresh his memory, in a pleasant way, upon the fact that the AMERICAN BEE JOURNAL began to be published as a *weekly* paper on Jan. 1, 1881—*over four years before* the *Canadian Bee Journal* was born, which was April 1, 1885. The latter is now a semi-monthly.

In his reply to Mr. W.'s suggestion, the editor of the *Canadian Bee Journal* must have overlooked the misapprehension on the part of his contributor. In that response, our brother editor makes some very complimentary reference to the AMERICAN BEE JOURNAL, a portion of which we reproduce, as follows:

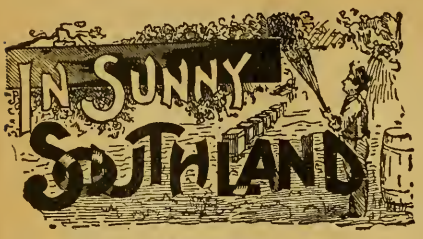
We should be very glad, indeed, if we could see our way clearly to a return to first principles, and the re-issue of the *Canadian Bee Journal* as a weekly journal. We do not know what the experience of the AMERICAN BEE JOURNAL is, beyond the fact that we are happy to observe that it appears to be a prosperous venture. Our experience was that the weekly issue did not pay, and there was consequently no alternative left but to make the change. It counts largely in favor of economy of production, on the part of the AMERICAN BEE JOURNAL, that it is published within almost the center of a circle whose periphery encloses a *clientelle* of some sixty millions of people. And although we enjoy a considerable circulation upon our own axis, as well as within the periphery of the AMERICAN BEE JOURNAL, all the opportunities are more favorable to our contemporary than to ourselves. We can only say, in the meantime, that we are really glad to believe that the AMERICAN BEE JOURNAL is so well able to sustain its weekly issue, and we wish it all the success it deserves.

It does rejoice us very much to see the truly brotherly feeling existing among all the editors of the various bee-papers. This is only as it should be, we think. We most heartily reciprocate the cordial "wish" expressed in the last sentence written by our Canadian brother editor. "The greatest possible good to the greatest possible number" can be attained only by the existence of the "greatest possible" fraternal feeling on the part of those who control our apiarian periodical literature.

Bees are Old Inhabitants.—We recently read that "it is claimed that the honey-bee has existed geologically as an inhabitant of our earth ages before the appearance of the human race, living, doubtless as now, in orderly communities, laboring for a common purpose, and leading a wonderful life in all interesting relations with each other. The industry, the law of order, the neatness and the loyal devotion to the queen are remarkable in these insects."

The West Virginia State Building at the World's Fair is given on the opposite page. We have been showing a number of the State buildings during the past few months, as all bee-keepers, as well as the rest of mankind, are interested in whatever relates to the great Fair of 1893.

Don't Fail to read all of page 813.



CONDUCTED BY

Mrs. Jennie Atchley,

GREENVILLE, TEXAS.

Big Yield from Horse-Mint Expected.

We have had a rainy spell for a few days, and lots of mud. Horse-mint, one of our best honey-plants, is up nice, and we anticipate a big yield from it next spring, as it seldom fails when it gets an early start. J. A.

Greenville, Tex., Dec. 13, 1892.

'Way Down in Tennessee.

My spring crop of honey from about 60 colonies amounted to only 81¾ pounds of comb honey in sections, and the fall crop was only 9¼ pounds. Several of my colonies had to be fed. The swarming impulse was not hard to control—only 6 swarms issued. My location is in the mountains near the Cumberland river, and some years—I might say most years—the bee-pasturage is good. The honey crop on the higher land, 20 miles from here, was excellent.

INTRODUCING QUEEN-CELLS. — Some writers advise against introducing queen-cells immediately after removing the old queen. For two years I have been improving my stock, and have introduced, I suppose, thirty or more cells just after the removal of the old queen, and I do not remember to have lost a a single cell. Some were placed in strong colonies, and some in nuclei.

QUEER CONDUCT OF A SWARM.—Here is an entry on my record under date of June 9, 1892: "The swarm of the 7th—the only one I have had—was placed on the old stand at night, the swarm having come out about 3 p.m. Next morning the bees of the swarm were killing the bees that came back from the parent colony, and continued to do so notwithstanding I smoked them, and they were getting plenty of honey." I am confident I was not mistaken in the hive they came from, and that there was only one swarm. I am unable to see why they should kill each other after being separated only a few hours.

THE BEST QUEENS.—The colonies having queens from my imported queens have done decidedly the best, so far as honey is concerned, this year, with possibly one exception, and I cannot say for certain whether the queen of that colony is from the imported stock, or not.

L. K. SMITH.

Gainesboro, Tenn., Dec. 8, 1892.

Feeding Bees in Winter.

I cite the following from page 188 of the December *American Apiculturist:* "Don't undertake to feed bees in the winter. It is sometimes done successfully, but it proves a failure in 90 per cent. of all cases so treated. There is no practical method, and no feeders by which feeding can be made a success or practical."

Bro. Alley surely does not mean to let the bees starve, just because it is winter! I hope he will excuse me when I say, yes, feed your bees any day out of the 365, if they need it, just the same as you would feed your horse, and if you are any bee-keeper at all, you will be more successful every time, rather than let them starve.

It may be more difficult to feed bees in the North during winter than it is here, but I assure you that if I lived in the North I would feed my bees if they needed it. But it is best to leave the bees alone in winter, unless it is actually necessary to disturb them.

I feed my bees (some of them) all winter, and I do not lose any of them either, and any one can do the same, for I use no particular means, only see that they get the food. When the weather is warm enough, I use a milk-pan feeder on top; if not, I fill a comb and hang it right up to the cluster. J. A.

Doolittle's Queen-Rearing book should be in the library of every bee-keeper; and in the way we offer to to give it, there is no reason now why every one may not possess a copy of it. Send us one new subscriber for a year, and we will mail the book to you bound in paper, as a present.

The Clover Blossoms.

Some sing of the lily, and daisy and rose,
And the pansies and pinks that the summer time throws
In the green, grassy lap of the medder that lays
Blinkin' up at the skies through the sunshiny days;
But what is the lily and all of the rest
Of the flowers to a man with a heart in his breast
That has dipped brimmin' full of the honey and dew
Of the sweet clover blossoms that his boyhood knew?

I never set heavy on a clover-field now,
Or fool round a stable, or climb in a mow,
But my childhood comes back just as clear and as plain
As the smell of the clover I'm sniffin' again;
And I wander away in a barefooted dream,
Where I tangled my toes in the blossoms that gleam
With the dew of the dawn of the morning of love
Ere it wept o'er the graves that I am weeping above.

And so I love clover—it seems like a part
Of the sacredest sorrows and joys of my heart;
And wherever it blossoms, oh, there let me bow
And thank the good God as I am thankin' Him now;
And pray to Him still for the strength when I die
To go out in the clover and tell it good-by,
And lovingly nestle my face in its bloom,
While my soul slips away on a breath of perfume. —Selected.

Merits of Five-Banded Bees.

I will tell what I like about the five-banded bees:

1. They are a large, strong, healthy bee.

2. They are very industrious, and can carry a good working gait, when the wind blows so hard that all the other species of bees that I have cannot venture out.

3. They enter the sections just as soon as they are ready, and will climb right up and fill all that they can get the honey to do it with.

4. They show but little disposition to swarm, as only one out of the 6 colonies that I had, offered to swarm the past season, and what they may do is to be learned later.

5. They cap their honey the whitest of any bee that I own.

6. They are as gentle as butterflies.

7. They are perfect beauties.

I have no interest in any particular kind of bees. The bee that pays me best for my labor is the bee for me. My business is producing honey, and not the sale of bees or queens.

The five-banded bees did this for me the past wet season:

The first gave me 132 pounds of honey; the next best, 99 pounds; the next, 66 pounds, and the least gave me 50 pounds and cast a swarm. This was nearly all from clover, as basswood was a failure, and all was secured from June 20th to Aug. 1st.

I have been so well pleased with what those 6 colonies of bees have done for me the past season (1892), that I bought 42 this fall, and will report next fall whether they are then in possession of the "red card" that they so honestly earned the past season in my yard.—IRA BARBER, in *American Apiculturist.*

Wet Sheet Pack for Bee-Stings.

A young man in this neighborhood was stung by a bee. It made him so deathly sick that a physician was called. He did not recover for a week. Such results from a bee-sting are rare, yet they do sometimes happen, and persons affected in this way should be kept away from bees.

When a person that has been stung is very sick because of it, and breaks out in large blotches all over, a good thing to administer is a wet sheet pack without delay. It is done thus:

Spread two comfortables upon a lounge, and then wring a blanket or sheet out of hot water, lay the patient upon the center of it, and tuck the bed clothes snugly about him, so that no air can enter. Finish with a warm brick at the feet, and a cool cloth upon the head. The room must be dark, airy, and very quiet, and the patient will be usually relieved at once, and drop off to sleep. When he awakes, which will usually be in half an hour to an hour, he should be washed in a tub of tepid water, showered with water a trifle cooler, and put to bed immediately. This is also excellent treatment for breaking up a cold or fever.—MRS. L. HARRISON in *Orange Judd Farmer.*

How Long Can Bees Live on Only Bee-Bread?

Query 850.—1. How long can bees live in winter quarters on bee-bread, without honey? 2. Or can't they do it?—Michigan.

2. They *can't* do it.—G. M. DOOLITTLE.

1. Until they die. 2. Yes!!!—A. B. MASON.

1. Don't know. 2. Not long.—E. FRANCE.

1. But a very few days, at most.—J. M. HAMBAUGH.

1. I don't know. Not long, I think.—EUGENE SECOR.

1. They cannot live on bee-bread alone.—MRS. L. HARRISON.

Not long enough for any practical purpose, at any rate.—JAMES A. GREEN.

1. Until the honey in their honey-sacs is exhausted, and a very few days longer.—M. MAHIN.

1. A few days, until the bee-bread makes them sick with bee-diarrhea.—JAMES HEDDON.

I can answer this Yankee fashion, by asking, What would they be good for if they did live?—H. D. CUTTING.

1. Only so long as the bee-bread contains any honey. 2. They can't *subsist* on bee-bread alone.—J. E. POND.

1. They can't do it. At any rate, we would not want to try it, for we feel sure we would lose them.—DADANT & SON.

1. Bee-bread would add very little, if anything, to the length of their lives in ordinary winter quarters.—R. L. TAYLOR.

1. I never experimented in that line, and if there is any such thing on record I am not aware of it.—MRS. J. N. HEATER.

1. No longer than as though they had no food. Honey is the food for quiescence, and pollen is not needed. Breeding and activity call for pollen.—A. J. COOK.

1. When the honey is all gone it will be but a question of a very few days how long the colony will live.—C. H. DIBBERN.

I've had them starve with plenty of bee-bread, but I don't know how long they lived (if at all) after the honey was gone.—C. C. MILLER.

1. Probably for a short time; but look out for "spring dwindling." I would not care to have my bees in this condition.—W. M. BARNUM.

1. I have not kept an account to the hour, but I have observed that they can survive only for a short time. Without the honey, the pollen rapidly produces a disease of the intestines, and death.—J. P. H. BROWN.

1. I have had them starve on plenty of bee-bread in winter. It may be known that they are starving by the great number that may be found running out of the hive to die. 2. They cannot live long without honey.—G. L. TINKER.

1. They will live just about long enough to starve to death. 2. Not much, I have had colonies starve just as quick after the honey was all gone, with combs quite heavy with pollen. But we get some pollen here sometimes that is very sweet, or moist with honey, and the bees can live on that a little while. But, as you ask *without* honey, I say No.—MRS. JENNIE ATCHLEY.

1. I don't think that adult bees can live at all on bee-bread. In numerous cases I have had bees die from starvation when several combs were full of good, sweet pollen. When bees consume pollen, they must have honey and water, too, to soften and mix the pollen into a sort of paste, so that they can take it into their stomachs. Bees can only take food when in a liquid state.—G. W. DEMAREE.

The Ladies' Home Journal, of Philadelphia, Pa., is perhaps the finest monthly home magazine in the world. If ordered before Dec. 25th, 1892, we can club it with the BEE JOURNAL—both Journals for one year—for $1.60, to *either old or new subscribers.* If you are a new subscriber to both JOURNALS, you will receive ours the rest of this year *free;* and the "Ladies' Home Journal" will begin with the January number.

Hiving Swarms on Drawn Combs in Producing Comb Honey.

Written for the American Bee Journal
BY W. Z. HUTCHINSON.

In the Bee Journal of Oct. 27, 1892, I was considerably interested (and somewhat surprised, too) to see the replies given in response to the Query, "What is the best plan to make use of a lot of nice brood-combs, should I wish to work my bees for comb honey, allowing each colony to swarm once?"

With one or two exceptions, the answers favor hiving the swarms on the combs. I cannot help wondering how many have tried hiving swarms on drawn combs, and at the same time tried hiving some of their swarms on starters only, or on sheets of foundation. Years ago, I gave the plan a trial, and have continued to try it until I am satisfied that, for me, it would be money in my pocket to burn the combs rather than fill the brood-nest when hiving swarms in producing comb honey.

Let me explain briefly how I produce comb honey. I use supers and practice the tiering-up plan. When a super is half-full and honey is coming in at a fair rate, the super is raised and an empty one put between that and the hive. In a short time, depending upon the rate at which honey is coming in, the upper super will be found two-thirds completed, and the lower one half filled. If the bees do not swarm, another super is soon given the colony, it being placed next to the hive. In a short time the upper super will be ready to come off, and the lower ones will be in such a stage of completion that another super can be added next to the hive.

Almost every bee-keeper understands that in tiering up this process is continued as long as honey continues to come in, and bees do not swarm. But in three cases out of four, in a good season, the bees *will* swarm. They seldom swarm until a start has been made in the sections. At least, this is usually the case when sections have been put on soon enough, and some of the sections contain partly or fully drawn combs. In the past, many bee-keepers felt that with the swarm went a fair share of the hopes of any surplus. The swarm was hived in a full-sized brood-chamber, and given a new location, and it required the remainder of an ordinary season to build up and fill the hive for winter. If left to itself, the old colony usually swarmed until it was of no value as a storer of surplus. If after-swarming was prevented, the old colony would do fair work if it had cast its swarm early in the season.

When a swarm issues I do not give it a new location, but hive it on the old stand, setting the old colony to one side and preventing after-swarming by the Heddon method. This plan throws all of the working-force into the new swarm. No more surplus is expected of the old colony; all that is expected of that is to build up into a good colony for winter. The surplus is all taken from the swarm. The brood-nest is contracted to the capacity of six Langstroth frames, or one section of the new Heddon hive.

Now it is a fair question why I would not fill those brood-nests with drawn combs. The first thing that the bees will do is to fill the combs with *honey*. They won't work in the sections until they have filled the brood-combs, and when they have filled them they seem loth to begin work in the sections. They seem to feel as though they had finished their job, and it was asking too much of them to commence another job away off upstairs. Slowly, gingerly, grudgingly, they will finally begin to work in the sections if the honey-flow continues.

Colonies hived on starters, or foundation, cannot store honey in the brood-nest until comb has been built or foundation drawn out. The surplus cases are always transferred from the old colony to the newly-hived swarm at the time of hiving, and as the bees have nowhere else to store their honey, they at once begin work in the sections where they left off when swarming. Within 20 minutes from the time that a swarm has issued, I have had the bees right back in the same sections at work with the vim that comes only from a newly-hived swarm.

Where bees begin to store their honey when they are hived, there they prefer to keep on storing it. When there is no comb in the brood-nest the honey must

of necessity be stored in the sections (when those filled with comb are given) until comb is built in the brood-nest, and as fast as the comb is built the queen fills it with eggs, and the result is that the honey goes into the sections where it is worth 15 cents a pound while the brood-nest is filled with brood.

With this system of management, queen-excluders must be used, else the queen will at once invade the sections where the bees will soon empty some of the cells of honey to make room for her to begin laying. I have managed without excluders by putting one or two combs in the brood-nest to give the queen a chance to begin laying in the brood-nest when the swarm is first hived, and by the time that she is well started there, more cells will be built in which she can lay. The brood-nest being started in the right place, there it will remain.

So far as results in surplus honey are concerned, I have been more successful in using simply starters in the brood-nest, but the objection to, their use is that the combs are not always straight, and often drone-comb is the result. To remedy this, it has been urged that the combs can be sorted over, and the imperfect ones melted into wax.

This matter of using combs to hive swarms on when producing comb honey is not one of theory alone with me, as I have hived one swarm on starters, then one on sheets of foundation, then one on drawn combs, and noted the results. I continued to thus experiment year after year, until I was most thoroughly convinced that the use of drawn combs was a loss. I not only secured less surplus honey, but the colony was left in no better condition for winter. Between the use of foundation in full sheets, and simply starters, there was not so much difference in results, but the balance was in favor of simply the starters, while the cost of the foundation must be considered in addition.

It was the result of these experiments that led to the publication of my little book on the "Production of Comb Honey." Three thousand copies of the book were sold, and I would be glad if the purchasers of that book would tell where I am at fault, if I am at fault.

Flint, Mich.

Webster's Pocket Dictionary we offer as a premium for sending *only one new* subscriber with $1.00. It is a splendid Dictionary—and just right for a pocket.

Sour Honey and Adulteration—Both Detrimental.

Written for the American Bee Journal

BY FRANK COVERDALE.

It has always been a mystery to me, since we have attained such perfect machinery for throwing honey from the comb, that this product should not sell at a more paying figure. It is not, in my opinion, he who carries on adulteration that must stand all the blame, but he who is so careless as to extract unripe honey, let it sour, and then place such on the market, or place it on the market just as soon as it is extracted. Such honey, sealed tight in jars or receptacles of any kind, will soon ferment, and even if such is sold before souring, it is too thin, and the consumer will say there is water in that honey.

I am sorry to say that much of this sort of stuff is placed on the market—far more than I had any idea of until I became "cheeky" enough to take advantage of every opportunity to taste, and what a puckery taste it is, and, to my sorrow, I know that it is a fact.

Even at the Fairs it stands on exhibit. Then if our foremost brethren will do this, how much more so with the less experienced. I now feel confident that much pure honey is on the market—that which is a positive damage to our trade. How long this state of things will last I do not know.

Honey, when thoroughly ripened by bees, is rich, pure, sweet and healthful, and such honey thrown from the comb should bring a far better price on the market than it does at present.

The very best comb honey will not take the place of extracted on our table. Our children will cry out for extracted honey. Would not the mass of people at large do the same, in a measure, if they were not so ofttimes "bitten" with fermented, soured, and sometimes adulterated, honey? Such honey is not as good as "black-strap" molasses, and until such affairs can be overcome, the price for extracted honey must at large remain low.

I took some very nice honey to our grocery store one day—such as could hardly be expected—and the clerk said that 10 cents was all that he could pay, and wanted to know if it had been boiled. I looked him smilingly in the face, and informed him that it didn't need any boiling.

"Yes," he insisted, "it must be boiled, or it would not keep."

Then I opened a jar and told him to taste it, which proved to his taste to be O. K., but he said it wouldn't stay so unless it was boiled! I knew that something was wrong, and I kindly asked him if he would show me where they kept their store honey, that was not on the counter. Down cellar we went. It was cold and damp—such a place to keep honey! Before I left that place I delivered a lecture—not short—and sold him my honey, and it is my strong belief that no more honey is kept in that cellar.

It would be well for every one who sells honey, to warn them not to keep it in cellars. Freezing and thawing will sour both extracted and comb honey. The producer should guard against it, as it injures the honey.

Welton, Iowa.

Difference in Eggs of Impregnated Queen and a Virgin.

Written for the American Bee Journal

BY C. J. ROBINSON.

Query 843, on page 598, propounds three several questions: First, "Are the eggs in an impregnated queen different from those of a virgin?" This question, thus formed, calls only for a "Yes," or a "No," yet in the 22 answers, from as many bee-keepers, but three make square answers, thus: Two say "*No*," and one says "*Yes*."

Evidently the propounder queried thus: Are the eggs "in any way changed" by copulation? He might well ask, "Is a queen in any way changed by being impregnated?" The proposition refers to two several queens—an impregnated and a virgin. The problem is, Are the ovary organs changed at all in a queen by her being impregnated? If her egg organs do not become changed "in any way," her virgin eggs, developed after copulation, are not in any way different from eggs in her "matrix" before meeting a drone.

How it is—the wonderful *modus operandi* of nature—that an egg-producing bee in due form (queen) comes forth, must, in the order of creation, remain a profound mystery. Belief based on speculation is but vanity, yet the mystery is speculated upon in such an overweening way by some writers that most readers verily believe that such writers are inspired.

When so-called virgin queens come forth they remain immature—incompetent to reproduce, so that the race may be perpetuated, until, per chance, they meet and become matured by receiving from the drone the male *organ*—that which secretes and furnishes spermatozoa to change the egg, thus rendering her fructified by being impregnated.

The notion that a virgin queen receives from a drone into her "sac" sufficient spermatic fluid to impregnate her worker eggs during an existence of six or more years, is the sum of ignorance. Spermatic fluid introduced into a queen, unless immediately utilized, would be like any foreign matter. Certain it is that queens generate and regenerate eggs through their ovary ducts, and after receiving the male organ they are fully matured so as to generate spermatozoa with which to impregnate virgin eggs. The drone introduces his spermatozoa-generating organ into the queen, the organ being so formed that it at once becomes grafted on to the membranes or walls of the cavity left vacant naturally in immature queens.

Some half a century ago certain German bee-scientists applied the term "parthenogenesis" to queen-bees not having copulated. If the definition of the term (a compound word), as recorded by lexicographer R. Owen, and copied by the revisers of Webster, is correct, there is no valid or tenable ground for claiming that honey-bees are like the genera to which parthenogenesis can properly be applied. The hive-bees belong to the family of insects of the order *Hymenoptera* (q. v.), belonging to the section of that order called *Aculeata*, in which the female (workers) are not furnished with an ovipositor. Hence the order *Apis mellifica* cannot perpetuate their restricted genus only by impregnation of eggs by male sperm. Not so with the order of insects that procreate from eggs produced by females without being impregnated with male spermatozoa.

The term "parthenogenesis" (gr.) is a compound word, signifying virgin and young, and is defined by Prof. R. Owen thus: "The successive production of procreating individuals from a single *ovum* (egg) without any renewal of fertilization." Certain German writers claimed that parthenogenesis really related to the propagation of honey-bees, because so-called virgin queens produce ovum that hatch male bees only; but the race cannot be multiplied or perpetuated without the element furnished by the male sex. Not a virgin queen can be begotten without a "renewal of

fertilization," and, without such renewal, virgins are of no account as progenitors or mothers. Hence, without said renewal, the *Apis mellifica* family would inevitably become extinct.

Richford, N. Y.

A Nebraska Report for the Season of 1892.

Written for the American Bee Journal

BY WM. STOLLEY.

My report for the year 1892 is as follows: Last winter I wintered (without loss) 39 colonies. One I found queenless in the spring, and united the bees with another weak colony. I sold 4 colonies for $40, and thus began the campaign with 26 colonies run for extracted honey, and 9 colonies for comb.

The spring of 1892 was cold, wet and changeable—in fact, the worst spring I ever experienced, followed by a severe drouth, which greatly curtailed the honey-flow in midsummer. The result is not very good, but much better than I see many reports in the BEE JOURNAL.

From the 26 colonies run for extracted honey, I obtained a trifle over 50 pounds per colony, and from the 9 colonies worked for comb honey, I got, on an average, but 17 pounds per colony, owing to the swarming of 5 colonies worked for comb honey. The 4 colonies which were worked for comb honey in one-pound sections, and which did not swarm, gave me 141 sections, or, on an average, 35 pounds.

My increase is but 4 colonies, so that I have now 38 colonies, all of them in first-class condition, and provided each with not less than 25 pounds, net, of winter stores, while I have set aside for spring feeding 110 frames containing about 400 pounds of honey.

I have requeened my apiary, so that I have now 26 queens reared in 1892, and but 12 queens reared in 1891.

My bees winter on the summer stands in double-walled hives, well packed inside the hive. They had their last flight on Dec. 2nd.

The total income from my bees will be about $205 cash, or $6.20 per colony, and an increase of 4 colonies.

Sweet clover and alfalfa are my main resources for honey. The fall bloom did not amount to much this year.

Grand Island, Nebr., Dec. 2, 1892.

Have You Read page 813 yet?

Bees in California—Their Introduction; Harbison, et als.

Written for the American Bee Journal

BY W. A. PRYAL.

(Continued from page 795.)

Bees were taken to the Sacramento valley by A. P. Smith, in 1855, and in 1856 to the southern part of the State. San Jose was the distributing point.

In the fall of 1855, Mr. Harbison had prepared in the East a colony for shipment to him at Sacramento. It arrived Feb, 1856. Though many of the bees had died *en route*, he was satisfied that by proper care and handling, he could bring any number of colonies through all right. His one colony proved to him that there was plenty of good honey along the Sacramento.

Accordingly, in May, 1857, he went East, and on Nov. 5th he left New York with 67 colonies. Aspinwall was reached ten days later; the bees were given a flight at this point during the evening; on the 16th they were on board the steamer at Panama, and arrived in San Francisco on Nov. 30th. They were reshipped by river steamer, and landed at Sacramento Dec. 2nd. They had made a journey of 5,900 miles—the longest ever known at that time of bees being transported at one continuous voyage. Of this importation, only 5 colonies succumbed. The loss was attributed to the ravages of the bee-moth.

HARBISON'S START ON A LARGE SCALE.

This was verily Mr. Harbison's start in bee-culture on a large scale in California. All his manipulations with the industrious little workers there, with a few minor exceptions, were enviable successes.

In the '70's he went to the lower part of the State. This was about the time of the announcement of the wonderful honey resources of the southern counties. His large, practical knowledge as an apiarist soon placed him at the top of the ladder. He was soon the greatest honey-producer of the world. His was the biggest shipment of honey to cross the continent—some ten cars being required to move a portion of his crop in 1876. I believe a large part of his honey was sent to England, where it sold readily at a fair price. His apiaries were scattered through San Diego county, and he carefully trained young men to manage them.

HARBISON'S HUMANE SPIRIT.

His life among the bees shows what intelligence and perseverence can accomplish. The myriads of bees he had toiling on hill and dale in the "perennial sun land," brought him a goodly store of golden dollars. No longer does the industrious bees labor from early morn to dewy eve for him. In truth, he has emancipated the faithful little slaves. He feels that they served him well, and he no longer desired to hold the whip over them, as it were. Where in the world can the whole race of bees find a truer master—a better friend than they did in J. S. Harbison? It was his life-long aim to give not only his bees, but also everybody's bees, a comfortable home where they would not be ruthlessly murdered when being plundered of their well-earned stores, by man.

MOST PROGRESSIVE AND INVENTIVE.

While not in one whit wishing to detract from the fame which our friend, Rev. L. L. Langstroth, has merited, I think that Mr. Harbison stands to-day the best example of a progressive and inventive bee-keeper in the world. His book is but little known to the present generation of apiculturists; it is a classic nevertheless, and if it were not for his active life and natural modesty, the bee-keeping world would probably to-day be indebted to him for other editions than the single one he turned out a generation ago; besides, we might have read articles in apicultural publications from his versatile and experienced pen—articles bristling with practical information which no other living apiarist could impart.

PROPHECIES MADE BY HARBISON.

I cannot well close this series without a further peep into the mine of wealth which he has given us in his Directory.

Right here I would remark that I cannot help calling him a "prophet." It is quite remarkable how he was able to foretell to what proportions the honey industry of this State would attain. We must remember that when he prepared this book for publication, he kept bees upon the banks of the Sacramento river—a region which is not now considered a honey section, although much honey of good quality is yet produced there.

Where were more prophetic words ever written than the following, taken from page 193 of his "Bee-Keepers' Directory," where he speaks of the quantity and quality of California honey:

"..... And *the time is not far distant when*, if the business of bee-rearing receives the attention that it deserves, *the export of honey and beeswax will be no inconsiderable item of revenue to the apiarists of the Pacific Coast.* The mountain honey will probably take the lead, both for beauty and excellence of flavor." The italics are the writer's.

Yes, indeed, it has become a big item, so much so that Californians point to it with pride. When Mr. H. wrote the foregoing quotation, the marvelous sage region as a honey country was undreamed of by the bee-keeper. But Mr. Harbison well knew that California is a vast bee-garden. Its mountains and valleys, from Oregon to the Mexico line, and from the Sierras to the Sea, abound in honey-flora. Sites for apiaries innumerable are yet undiscovered in the thousands and thousands of little valleys and canyons nestling about its pretty hills and grand mountains.

INVENTION OF BELLOWS BEE-SMOKER.

I have often heard the name of Mr. Quinby mentioned as the inventor of the bellows bee-smoker, but the edition of his book published in 1865, makes no mention of such smoker. On the other hand, Mr. Harbison not only gives a description of such a smoker, but a very good wood-cut. He does not say who is the inventor. He describes it so fully that anybody could make one out of an ordinary pair of hand bellows. This, in itself, was information which was worth more than the price of the book. And it was in keeping with his usual plan of doing everything to make the pursuit easy for the bee-keeper, and less of a hardship on the insects he thought so much of.

North Temescal, Calif.

"Apicultural Literarians"—A Defense in Their Behalf.

Written for the American Bee Journal

BY WM. F. CLARKE.

In the AMERICAN BEE JOURNAL of Nov. 24, 1892, on page 695, among suggestions for the improvement of bee-periodicals, is the following from Mr. James Heddon:

> First, most, and all the time, wipe out the perpetual curse of filling our bee-papers with the writings of apicultural literarians, and replace it with honest reports and opinions from honey-producers who make bee-keeping pay.

This is not the first time Mr. Heddon has written in this vein. In an article

of his which appeared in the *Bee-Keepers' Review* for Nov. 10, 1890, there was an attack on a class of writers in the bee-papers whom he designated as "literary apiarists, pseudo-professional men, snide lawyers, quack doctors," etc. He expressed the opinion that the editor of a bee-paper should "get on to these fellows," and further, that he should "keep them out of his columns."

At the Michigan State Bee-Keepers' Convention, held about that time, Mr. Heddon was reported in the *Detroit Free Press* as having said "he knew of several men who wrote fluently on bee-keeping, who never produced a pound of honey in their lives," and more in the same strain. In the *Review* he said the editor could give the names of the parties referred to. Of course, then, he could have done it himself. Why did he not do so, while he was about it, instead of hurling disparagement at the whole tribe of literary and professional men?

According to Mr. Heddon, no one is of any account as an apiarist, or qualified to write in the bee-papers, unless he keeps at least 100 colonies, and makes bee-keeping pay from a dollar-and-cent point of view. He must be a specialist, or he is a know-nothing. Now, I beg to ask how many of the great lights of bee-keeping have been specialists? Huber, the father of modern apiculture, was blind, obtained his facts by the observations of others, reasoned on them, and published his conclusions to the world. I question if he ever sold a pound of honey. According to Mr. Heddon, "such a writer could only be misleading, and ought to be weeded out of bee-literature." How much of bee-literature would be left if all such and their writings were weeded out of it? These attacks on "literary apiarists," and "apicultural literarians" reflect no credit on Mr. Heddon. They are wanton onslaughts on a whole class of men, some of whom may be unworthy, but most of whom have rendered signal service to bee-keeping.

Moreover, these attacks are ungrateful returns for the eminent services rendered to Mr. Heddon personally, by the very class of men whom he so unsparingly denounces. When he got up his book, entitled "Success in Bee-Culture," he was glad to avail himself of the help of a literary man whom he calls "My Friend" throughout its pages, and who was not at the time, and had not been for years, engaged in practical bee-keeping,

What Mr. Heddon has written on this subject hits the Nestor of American Apiculture, "the unkindest cut of all," and is a most ungrateful return for the great lift Father Langstroth gave him in writing up his hive.

No one appreciates more highly than I do Mr. Heddon's abilities and attainments as a bee-keeper, and I have many times, cheerfully and spontaneously, used my pen in his defense against envious and unscrupulous assailants. I must confess I feel stung to the quick by his caustic and unjust criticisms, for if there is any man living who belongs to the class he has singled out for massacre, I am he. I depend upon my pen for a livelihood, and I keep bees, not for pecuniary profit, but because I love the pursuit. Moreover, I believe that a bee-keeper, who, like myself, has from a dozen to twenty colonies, whose wondrous ways he watches and studies with absorbing interest from day to day, may be just as well qualified to write about bee-keeping as one who owns hundreds of colonies, and sells honey by the ton. What is there to prevent such a man from giving "honest reports and opinions?" I contend that he is all the better qualified to do so, from the fact that he does not look at the pursuit from a purely financial stand-point. He is in a position to be thoroughly impartial, disinterested, and unselfish.

Guelph, Ont.

An Interesting Experience with Queen-Bees, Etc.

Written for the American Bee Journal

BY E. B. KAUFFMAN.

I have taken some interest in bees for several years, which I bought in box-hives. I then got bee-books, and in the season of 1891 I transferred one colony to a movable-frame hive, and got along nicely. I bought an Italian queen-bee and introduced her with success. Strange it is what happened to her; see the BEE JOURNAL of March 10, 1892, page 344.

In the latter part of March I bought from the South another queen for the same hive, and introduced her as directed. Then I left home for Lancaster City. In one week I returned, and as I came to that bee-hive I noticed the queen dead on the ground. I opened the hive and found no brood. I then united the bees with another colony. My wife then told me she would rather see me upset the hives and give up bee-keeping, but I transferred the other

bees to movable-frame hives, which are very cross blacks, but by giving them a tremendous dose of smoke I can handle them.

I wrote to the Southern queen dealer about my ups and downs, and that the queen's journey had been too great. The dealer had seen what was described in the BEE JOURNAL of March 10th, and answered as follows:

"I want you to stick a pin at some place, that I will send to you a three-banded Italian queen-bee free, which I will handle roughly before I mail her, and I want you to throw her around before you introduce her. She will be mine until *you* have her safe in the hive, then she is yours."

Well, that made me restless. I then sent to New York State for queen-bees, and received and introduced them O. K. I then again ordered more five-banded Italian queens from the South, and I introduced those O. K., and sometime in September I received the rough-handled queen. It was one Saturday, and I was not at home when the mail was brought. The cage was laid aside until Monday morning. I found her all right. I hope the dealer will see right here what I did with her. I took the cage with queen and threw her into a tree, and she fell through the limbs to the ground. This I did three times, and found her all right. I then removed a queen from some hive, and introduced her with success.

The dealer also told me this in a letter:

"I (or one of the boys did) threw her clear over the house, and the cage struck the lightning-rod as it went, but I found her O. K., and mailed her."

I have 10 colonies on the summer stands, with all good young queens, but I am glad to say the five-banded ones are the very best in breeding up this fall. I am very sure that I can have those hives boiling over with bees by the right time next spring.

I am thankful for what the Southern dealer has explained to me and others.

I will also say that last week, when I placed the rims between the bottom-board and hive, and some protection in an empty case on top, I opened the hive of the rough-handled queen, as I call her, with very little smoke. I took out one frame until I came to an outside frame of the cluster where I had seen a small lump of bees. All at once I noticed the queen among them, and two or three were fighting her terribly, and very soon the bees and queen flew up and fell in the grass in a rolling condition. I hurried the frame in, and before I got there the bees and queen were off. It was a nice day, but early next morning a wet snow fell about 4 inches deep, but in two days the snow was gone, and I then examined the hive again, and found her all right at home. What caused this? Will any one tell?

I am troubled with little ants around the bee-hives. I tried everything that I had seen given in the BEE JOURNAL, and it did not destroy them. They will crawl when it is too cold for bees to fly. I keep my bee-hives in a nice lawn in the summer, kept cut with a mower, and white sand under the hives, which are 6 inches from the sand on stakes driven into the ground.

Brickerville, Pa., Nov. 18, 1892.

Report of the Carolina Bee-Keepers' Convention.

Written for the American Bee Journal

BY A. L. BEACH.

The fourth annual meeting of the Carolina Bee-Keepers' Association met at the Court House in Charlotte, N. C., on Dec. 1, 1892. The meeting adjourned to the private office of Dr. J. B. Alexander, and was called to order by the President.

J. K. Rankin offered prayer, after which the roll was called, and the usual number answered to their names. The minutes of the last meeting were read and approved. The Secretary's and Treasurer's reports were read and approved, after which the convention entered into a discussion of the most prominent features of the pursuit.

The question, "How can we best bring about a more general interest in bee-keeping," claimed the attention of the members at length. The plan most favored was that all honey-producers work together in getting up a honey exhibit which would show that there is more than the "name" in this pursuit.

Nine members, representing 301 colonies, reported a surplus of 7,677 pounds, or an average yield per colony of 25¼ pounds. Owing to an excessive wet spring and summer this was thought to compare favorably with our friends of the North and West, who make bee-keeping a specialty.

The members reported a better sale for honey than of former years, which fact goes to prove that the masses are being educated up to the proper limit in the use of honey as a substantial food product.

It is earnestly desired that the press take a more active part in the dissemination of information on the proper culture of the little busy bee. Also, that the State Experiment Station take some steps to give this important branch of rural economy the attention it deserves.

"How does apiculture compare with other pursuits," was discussed, but no one having made the business a specialty, the general opinion prevailed that at least for the present it was only safe as supplemented to other kindred occupations.

It was thought, by intelligent management, that bee-keeping would compare favorably with the smaller industries—such as poultry-raising and truck-gardening, etc.

On motion, a vote of thanks was tendered Dr. J. B. Alexander for the use of his office; to the Mecklenburg *Times*, and other papers, for kindly printing notices, etc.; after which the association adjourned to meet at the Court House in Charlotte on the third Tuesday in July, 1893, at 10 o'clock.

A. L. BEACH, *Sec.*

"The Winter Problem in Bee-Keeping" is the title of a splendid pamphlet by Mr. G. R. Pierce, of Iowa, a bee-keeper of 26 years' experience. It is 6x9 inches in size, has 76 pages, and is a clear exposition of the conditions essential to success in the winter and spring management of the apiary. Price, postpaid, 50 cents; or given as a premium for getting one new subscriber to the BEE JOURNAL for a year. Clubbed with the BEE JOURNAL one year for $1.30. Send to us for a copy.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.

☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Heart-Rending to Give Up Bees.

Closing out my bees and discontinuing the BEE JOURNAL is heart-rending to me for there is nothing I like better than caring for bees, and sitting in the shade in summer and reading the JOURNAL. My bees did well the past year. They swarmed nicely, and stored 1,500 pounds of comb honey, and 175 pounds of extracted. I have kept bees for 25 years, but I find my health has failed, and so I will have to turn over my subscription to a lady here to whom I have sold my bees.

MRS. MARTHA ANDERSON.

Bushnell, Ills., Dec. 6, 1892.

Like Giving Up an Old Friend.

I have been in the bee-business for over forty years, and have had to give it up on account of poor health. It is like giving up an old friend to give up the BEE JOURNAL and the bees.

H. W. CONKLIN.

Rockton, Ills., Dec. 10, 1892.

Christmas-Tree Stand, Etc.

As Christmas is near at hand, I will tell how I made a pretty stand for a Christmas tree: I took a board 14x14 inches, and one inch thick around this I made a tiny paling fence—there is a post at each corner set firmly into a ¼-inch hole, and a gate at the middle of one side with little posts, the same as at the corner. The palings are about ⅛-inch thick, and ½ inch wide, and the cross pieces are just a little thicker. The best tacks I could find for tacking the palings to the cross-pieces were pins cut in two, using only the head ends. I then painted the fence white, and the board grass-green. In the center of this is a hole into which to fasten the tree.

Any one intending to have a large tree should have a large board.

Is that a perpetual "straw-stack" that Dr. Miller has?

Mr. Quigley has had a rather hard time of it. I can sympathize with him. and hope that the *Progressive Bee-Keeper* will be in progress again with the new year.

I would say to those who are afflcted with rheumatism, that if bee-stings gave them no relief, try the following simple remedy: Two ounces of alcohol, 15 drops oil of mustard.

For shipping comb honey in small quantities by express, I fasten two 12-pound crates together (one on top of the other) with a hoop, leaving enough on top to form a nice bail. The handles of 5-cent baskets are nice for this purpose. EDW. SMITH.

Carpenter, Ills., Dec. 9, 1892.

Rather Poor Season for Bees.

It has been a rather poor season here for bees for the last few years, or the last summer. I have 40 colonies of bees all in good condition for winter. The past summer I got only about 1,000 pounds of comb honey, all being white clover. I think the AMERICAN BEE JOURNAL is the best bee-paper out.

W. W. MARTIN.

Albia, Iowa, Dec. 8, 1892.

Report from a Great Worker.

I extracted 3,000 pounds of honey from 40 colonies, spring count, and all the honey sold around home at 9 cents per pound. I was five days selling the honey. My grain crop was 1,500 bushels of corn, and 400 bushels of oats. I was out no money for hired help. All the above work was done by myself.

GEO. W. NANCE.

Peiro, Iowa, Dec. 13, 1892.

Bees at the World's Fair.

I do not wish to dictate to the Superintendent of the bee-keepers' department at the World's Fair, but there are some things that perhaps will be neglected that are very essential, viz.: water and salt should be fixed not more than 100 yards from the bees—salt water in one trough, and fresh water in another, with a float to keep the bees from drowning. Something should be done to keep the bees from troubling the grocers. For safety, if it is possible, it would be well to give the farmers something to get them to sow buckwheat as near as possible—not farther than three miles from the building—say a premium for the best ten acres, and not less then ten competing for the premium. That would keep the bees from the stores and restaurants. I hope bee-keepers will have until the last of July to make their exhibit; if not, there will be a very small show from this State.

NOAH CLEMONS.

Murray, Nebr., Dec. 5, 1892.

Plenty of Good Honey for Winter.

I am very much pleased to see how the "Old Reliable's" dress has been changed. It is a welcome visitor in my home—I could not keep bees without it. I started with 40 colonies last spring; they have plenty of good honey to winter on. Bees generally are in good condition in this locality. I got 400 pounds of section comb honey this year.

B. F. BEHELER.

Jumping Branch, W. Va., Dec. 5.

Bees, Buckwheat and Poultry.

On page 758, I noticed the Query, "Will it pay to sow buckwheat for honey?" It seems to me, that although it depends some on the locality, and whether other plants that produce honey at the same season are plentiful, that it will pay to sow buckwheat, and harvest the seed. In this locality the seed will bring about 40 cents per bushel, and it will yield from 10 to 30 bushels per acre. I find it a valuable food for poultry, and now, as many wish to keep bees in connection with some other business, why not keep poultry, and so make a good market for their buckwheat?

FRANK P. CHASE.

Ubly, Mich., Dec. 10, 1892.

Tons of Honey Wasted—Report.

The honey crop in the Upper Sierras has been the best ever known; all varieties of honey-yielding plants furnished nectar abundantly all through their blooming season.

The honey-dew also furnished an abundant amount of fine nectar for the bees to gather. Some of our honey-dew honey is preferable to any gathered from natural bloom; it is generally spiced with an aroma from the tree it was gathered from; thus, that gathered from the cedars has a slight suggestion

of cedary flavor, which is very pleasant to the taste, and makes cedar honey preferred to other kinds by a great many people.

There were hundreds of thousands of tons of honey that went to waste this year in the Sierra Nevada Mountains, for want of bees to gather it. I am glad to note the decided improvements in the AMERICAN BEE JOURNAL.

S. L. WATKINS.

Grizzly Flats, Calif., Dec. 10, 1892.

"Bees and Honey"—see page 813.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.

Dec. 27-29.—North American, at Washington. W. Z. Hutchinson, Sec., Flint, Mich.

Dec. 28, 29.—Vermont, at Burlington, Vt. H. W. Scott, Sec., Barre, Vt.

1893.

Jan. 2, 3.—Ohio, at Washington C. H., Ohio. Dema Bennett, Sec., Bedford, O.

Jan. 10-12.—Ontario, at Walkerton, Ont. W. Couse, Sec., Streetsville, Ont.

Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis. Edwin Pike, Pres., Boscobel, Wis.

Jan. 12-14.—Minnesota, at Minneapolis, Minn. A. K. Cooper, Sec., Winona, Minn.

Jan. 16, 17.—Colorado, at Denver, Colo. H. Knight, Sec., Littleton, Colo.

Jan. 18, 19.—Indiana, at Indianapolis, Ind. G. P. Wilson, Sec., Tolgate, Ind.

☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

Your Neighbor Bee-Keeper—have you asked *him* or *her* to subscribe for the BEE JOURNAL? Only $1.00 will pay for it regularly to *new* subscribers from now to Jan. 1, 1894! And, besides, *you* can have Newman's book on "Bees and Honey" as a premium, for sending us two new subscribers. Don't neglect your neighbor! See page 813.

AMERICAN BEE JOURNAL

ESTABLISHED IN 1861 — OLDEST BEE PAPER IN AMERICA

PUBLISHED WEEKLY BY

GEORGE W. YORK & CO.,

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199 RANDOLPH ST., CHICAGO, ILLS.

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Never Send Silver in letters. It will wear holes in the envelope, or may be stolen.

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Subscription Credits.—The receipt for money sent us will be given on the address-label of every paper. The subscription is paid to the END OF THE MONTH indicated.

Do not Write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Emerson Binders, made especially for the AMERICAN BEE JOURNAL, are convenient for preserving each weekly Number, as fast as received. They will be sent, post-paid, for 50 cts. each. They cannot be sent by mail to Canada.

Lost Numbers.—We carefully mail the BEE JOURNAL to every subscriber, but should any be lost in the mails, we will replace them if notified before all the edition is exhausted.

Always State the Post-Office to which your paper is addressed, when writing to us.

Special Notices.

The Date on the wrapper-label of this paper indicates the *end* of the month to which you have paid for the JOURNAL. If that is past, please send us one dollar to pay for another year. This shows that Mr. Porter has paid his subscription up to the *end* of December, 1893:

Wallace Porter Dec93
Suffield, Portage co, Ohio

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, December 17th, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c,, according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Considerable honey coming in. Fancy stock for Holidays will bring fancy price. White comb now selling 16@17 cts., with dull market owing to mild weather. Extracted holds firm 8@9c. for fancy; 7c. for dark.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand is good for honey, with scant supply of all kinds. Extracted brings 6@8c., and comb sells at 14@16c. for best white. Although honey is scarce, there is no demand for dark comb.
Beeswax—Demand good, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Comb honey is selling slow, very much slower than we like to have it, and it is our experience that when we start honey in at a high price, it sells hard right through the season. We quote our market nominally at 17@18c. for best white honey, 1-lb. combs. Extracted, 8@9c.
Beeswax—None on hand. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK, N. Y.—Our market is quiet. Arrivals are freely, and the demand limited. We quote : Fancy white, 1-lbs., 15@16c. ; 2-lbs., 12@13c. Fair white, 1-lbs., 12@13c. ; 2-lbs., 11c. There are large stocks of buckwheat honey on our market, and we know of two lots of fancy 1-lbs. that sold at 8 and 9c. per lb., respectvely. We quote 1-lbs., glassed or in paper-boxes, 10c. ; unglassed, 9c. Extracted is in good demand at 8@8½c. for basswood and white clover ; 6@6½c. for buckwheat ; 70@75c. per gallon for Southern.
Beeswax—Dull at 25@27c. H. B. & S.

ALBANY, N. Y.—Honey market some quieter and prices some easier. White clover, 15@17c.: mixed, 14@15c.; dark, 10@11c. Extracted, white, 8@8½c.; mixed, 7@7½c.; dark 7c. Stocks light of both comb and extracted.
Beeswax, 27@28c. H. R. W.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

R. A. BURNETT, 161 South Water Street.
J. A. LAMON, 44 & 46 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN, 28 & 30 West Broadway.

San Francisco, Calif.

SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

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There is Not One Person but what can secure at least *two* new subscribers to the BEE JOURNAL, and get the splendid Premium offered on page 813. Try it.

Great Premium on page 813 !

Wants or Exchanges.

Under this heading, Notices of 5 lines, or less, will be inserted at **10 cents per line**, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED — A good Second-Hand Well-Drill. Give description, and lowest cash price. ALFRED SOPER,
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TO EXCHANGE—Pure Tested Young Italians, 3 to 5 bands, 50 cents to $1.00—for cash, wax or offers. F. C. MORROW,
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WANTED.—To introduce in every home—"New Dish Washer." Very simple. No complications. Does its work quickly, easily, effectively. Saves labor, and is CHEAP. Special inducements for 30 days. Address with stamp
24E Mrs. Minnie W. Gordon, Bloomfield, Fla.

Convention Notices.

THE NORTH AMERICAN Bee-Keepers' Association will hold its annual Convention in Washington, D. C., Dec. 27, 28, 29, 1892.
Flint, Mich. W. Z. HUTCHINSON, Sec.

OHIO.—The Ohio State Bee-Keepers' annual convention will be held in the Parlors of the Cherry Hotel, at Washington, Fayette Co., Ohio, on Jan. 2 and 3, 1893. Further particulars later. DEMA BENNETT, Sec.
Bedford, Ohio.

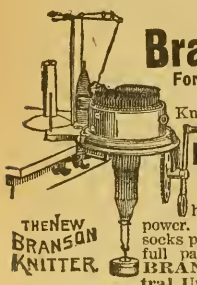
ONTARIO, CAN.—The annual meeting of the Ontario Bee-Keepers' Association will be held in Walkerton, Ont., on Jan. 10, 11 and 12th, 1893. All interested in bee-kecping are cordially invited to be present.
Streetsville, Ont. W. COUSE, Sec.

COLORADO.—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 16 and 17, 1893. Election of officers and other important business will come before the meeting.
Littleton, Colo. H. KNIGHT, Sec.

MINNESOTA—.The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan. 12, 13 and 14, 1893. The Thursday meeting will probably be a union meeting with the Horticultural Society which meets at the same place, commencing on Tuesday. A. K. COOPER, Sec.
Winona, Minn.

VERMONT.—The eighteenth annual meeting of the Vermont Bee-Keepers' Assocciation will be held in the city of Burlington, Vt., on Dec. 28 and 29, 1892. Every one interested in apiculture is earnestly desired to be present. As a bee-keepers' association, we know no State lines, but will gladly welcome all that come. Programs will be published soon. Holiday rates on the railroads.
Barre, Vt. H. W. SCOTT, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected; President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.



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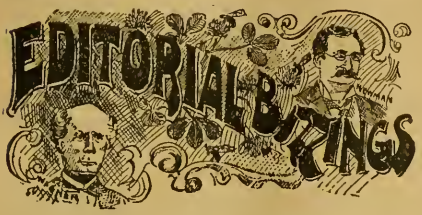
ESTABLISHED IN 1861

THE AMERICAN BEE JOURNAL

OLDEST BEE-PAPER IN AMERICA

GEORGE W. YORK, Editor. | DEVOTED EXCLUSIVELY—TO BEE-CULTURE. | Weekly, $1.00 a Year. Sample Free.

VOL. XXX. CHICAGO, ILL., DECEMBER 29, 1892. NO. 27.



Do You Want to be a hero?
Let us tell you how to do it:
Your subscriptions's just expired?
Then step up and please renew it.

A Happy New Year to every reader of the old AMERICAN BEE JOURNAL, is our most earnest wish, as the year 1892 ends and 1893 begins. If you want to return this "wish" in a very appropriate manner, just send $1.00 to us for the renewal of your subscription, and we will promise to be "real happy." The majority of the BEE JOURNAL subscriptions expire with this number, so that in renewing immediately you will be commencing the *new year* in a very commendable way. Don't put it off, but just as soon as you have read this, send us at least that one dollar's worth of "happiness," which we will return to you in 52 equal installments during the year 1893, and thus make you "happy" 52 times to our once. We repeat—we wish you

A HAPPY NEW YEAR.

Don't Fail to read all of page 845.

A Complete Index will be found in this number. It shows in a very compact form just what has been done during the past six months. It is a record to be proud of, and those who helped to make it are worthy of all honor and praise.

Bee-literature is "marching on," and its future is resplendent with glorious promise, which, in its fulfillment, will add still greater lustre to the already well-merited fame of modern apiarian periodicals. As in the practical work of the apiary, there has been wonderful advancement during the past few years, so in the literature of bee-keeping great and enduring progress has been made. Having learned well the lessons of the Past, we should be the better prepared to discharge the duties of the Present, while entertaining bright hopes for the Future.

Fifty-Three Numbers of the AMERICAN BEE JOURNAL have been issued this year, so those who have been fortunate enough to have been subscribers during the year 1892, have had one number more than is usually given in one year. No extra charge is made for this, the 53rd number, only we hope it may be appreciated, as we were not in duty bound to publish more than 52 numbers. We are glad, however, to be able to keep up the weekly visits of the AMERICAN BEE JOURNAL, and, as we have done this year, throw in an extra number besides.

One of the Very Oldest.—When renewing his subscription to the BEE JOURNAL for about the 30th time, Mr. J. L. Hubbard, of Walpole, N. H., writes as follows, dated Dec. 16, 1892:

I have taken the AMERICAN BEE JOURNAL from No. 1, Volume I, until now, and still find it as interesting as ever. Probably you have but few who have taken it so long. J. L. HUBBARD.

We should like to know just who among our present subscribers have taken the BEE JOURNAL continuously since its first issue, in 1861. We will publish the honorable list of names, if all those who have taken the BEE JOURNAL ever since it was started, will let us know when renewing their subscriptions, as did Mr. Hubbard. Let us hear from all such before Feb. 1, 1893. Then we will print the list.

Our Chinese Contributor—Wong Lung—of California, has his first article on page 858 of this issue. His experience is quite interesting, and he has fairly good control of our English language. If all who read it should happen to "smile a few smoles" when reading, we feel sure Mr. Wong Lung will not feel offended. We think it almost as good as the "tonics" we have seen advertised for the benefit of one's health. Nothing is better than a hearty good laugh, you know.

Volume XXX of the AMERICAN BEE JOURNAL is completed with this number. The record is made, and with the next issue we begin a new volume and a new year. We hope that the good company we have been in during the past year, may all continue with us. Having set our faces toward the apicultural goal, let us not turn back, but press onward until we have attained the desired end, and blessed commendation, "Well done."

Have You Read page 845 yet?

The Queries and Replies Department of the BEE JOURNAL was begun in the first number for the year 1885. During the eight years of its existence there have been answered 851 questions, by some 20 of the most expert bee-keepers in America. What a vast fund of information is to be found in those nearly 20,000 answers! This department alone is worth more than the yearly subscription price of the BEE JOURNAL.

Beginning with the second number for January, 1893, we will have replies given by at least 25 practical bee-keepers, and during the year we hope to be able to present a short biographical sketch, with portrait, of each one of those who so kindly and wisely contribute so much to the value of the BEE JOURNAL.

The great success and usefulness of the "Queries and Replies" department was assured from the very first, and all along the years it has been quite a feature of the AMERICAN BEE JOURNAL. The thanks of thousands of readers are due to those who have so faithfully endeavored to answer the many hard questions propounded.

Mr. J. H. Larrabee, for the past year or so connected with the Michigan Agricultural College, has returned to Larrabee's Point, Vt., where he again will make the production of honey his business. While at the College, he made many interesting and useful experiments of much value to the pursuit of bee-keeping. We enjoyed a very pleasant visit from Bro. Larrabee during the Illinois State Convention in October, and simply "fell in love" with him, as we did with others who were present, and whom we had not met before.

We wish Bro. Larrabee all the success he may anticipate in the ranks of honey-producers. Our readers may expect to hear from him during the coming year, if all is well.

Producing Sugar-Honey.—This subject has been discussed in both the *Review* and *Gleanings*, until the latter, at least, has wisely said, "no more discussion is cared for at present." We have persistently refused to permit a discussion of the subject in the columns of the AMERICAN BEE JOURNAL, believing that it was unnecessary, unwise, and entirely uncalled for. All who have written to us, or with whom we have conversed on the subject, have commended us very strongly upon our position, except, we may say, Prof. Cook and Bro. Hutchinson.

We still believe that we have taken the very wisest course in regard to the matter, excepting that it now seems that *some* of our readers think that by our *silence* we *favor* the production of "sugar-honey," as its defenders are pleased to call it. Nothing could be further from the truth, for the AMERICAN BEE JOURNAL is "*agin*" it first, last, and all the time, and believes that the less said about the subject the better. That is our position, no matter whether the production of such an article would be profitable or not.

The following conversational letter from one of the brightest and best lights in bee-keeping we offer as an excuse for referring to the subject at all in these columns. Omitting the name of the writer only, it reads as follows:

FRIEND YORK:—I have noticed you have said nothing *pro* or *con* regarding the sugar-honey discussion going on in the other bee-papers, and that is the very reason I mention it. I have been requested to give my views on the subject, and this is the way it came about:

Mr. G., of this place, who is about 60 years old, and a great bee-keeper, came in with *Gleanings* in one hand, and the *Review* in the other, and said:

"Say, look here, are we to believe, by the silence of the AMERICAN BEE JOURNAL, that Messrs. York, Newman, you, and the rest of the big family of the AMERICAN BEE JOURNAL are in favor of that sugar-honey swindle?"

"Oh, no, Mr. G., oh, no," I replied.

"Well, it looks very much like it, as I have always been taught that to be silent was to give consent; and I have followed the BEE JOURNAL all along the line of adulteration, and have endorsed its views on that subject from the beginning, and I have always thought that it was the most solid for the right, and the most ready to storm out like a peal of thunder against wrong, of any I ever saw. And we have always looked upon the AMERICAN BEE JOURNAL as the leading bee-paper of the world, always ready to defend the bee-keeping interest, and ready to discuss leading topics. Now, if this sugar-honey business is not a *leading* topic, and leading bee-keepers to destruction as fast as the Mississippi river is leading its waters to the sea, then I am fooled. And here you all sit, with the most influential means in your grasp—the AMERICAN BEE JOURNAL asleep. Wake up, and fight this old serpent, just as if you wern't afraid of Hutchinson, Hasty, Cook, or any one else, and live without fear or favor from any one."

"Well, Mr. G., you see I would rather not say one word about it, at present anyway, as I would rather let those that started the fight end it. Why don't *you* sit down and write to the BEE JOURNAL all about it?"

"Ah, you know I can't write anything—couldn't say what I wanted to say if I tried. Now, you say a little something about it, and may be you will start the ball to rolling," he answered.

The above is not all the conversation, but it is enough, I hope. Mr. G. is what people call a pretty long-headed old gentleman, if I am allowed such an expression, and he rather stirred me up a little, anyway. I am glad to see you have vetoed the discussion.

My own opinion is as follows: From a long experience in feeding bees, I have learned that, by feeding sugar syrup, or anything else to the bees, does not in the least change it. You may feed a colony of bees a barrel of sugar syrup, and it is no more honey *after* than *before* feeding. Of course, when the syrup is stored in the combs, and used as comb honey, the beeswax flavor goes along with it, which may make it taste a little like honey, but, even then I should think it would be a *very* poor bee-keeper, indeed, that could not readily detect it. I think the cow will have to jump over the moon before I will believe that the bees have the power to convert sugar syrup into anything that even resembles honey, to me.

I will add, that I believe that those who are using the press to argue this question, are doing wrong, and walking

on dangerous ground; *and any one that advocates such a course* before the public, surely *must* have a disregard for the best interests of the bee-keeping fraternity.

Here is what Mr. Newman has to say on the subject:

FRIEND YORK: — While I know you have decided to keep the discussion about that swindle, so-called "sugar-honey," out of the BEE JOURNAL, I must ask you to let me define my position. My friends, who know that I have always fought with all my might, such frauds, want to know now where I stand. One of my last editorials was devoted to this matter, and may be found on page 247 of the BEE JOURNAL for Feb. 18, 1892. I have not changed my views on it since then, when I said: "To put it into practice, would be to kill the industry, and hold its advocates up to view as a set of base swindlers."

THOS. G. NEWMAN.

Chicago, Ills., Dec. 23, 1892.

After reading the foregoing, though perhaps a little more emphatic than we would wish to put the case, in the main it expresses our views on the subject. All will now know why we have not permitted its discussion. While we do most sincerely respect both Prof. Cook and Mr. Hutchinson, and believe that they are great powers in the bee-keeping world, yet we must say that we think it was very unwise to discuss the subject at all.

With the hope that the unfortunate affair may soon be forgotten, and result in no harm to the pursuit, we turn from this questionable subject to others less dangerous and more promising of good to bee-keeping.

The Programme of the Vermont State convention was received, but not in time for publication in last week's BEE JOURNAL. Of course it would be useless to put it in this number, as the convention will be in session before we mail this issue. It is, however, a very interesting list of topics, and the report will be looked forward to with much eagerness by all.

Paddock Pure Food Bill.— Prof. Cook writes us as follows on Senator Paddock's Bill now before Congress:

I say *Amen* to Mr. S. H. Mallory's article on page 796. If the Paddock Bill is enough, then let us urge its passage with all our might. Mr. Editor, why not you examine it, and if good, send a page in the next AMERICAN BEE JOURNAL for each of us to copy, as a petition to Congress to have it passed? Let us act at once. A. J. COOK.

We are now in correspondence with Senator Paddock, and as soon as we have anything definite to offer we will give it to our readers. From what we have so far investigated, we think that Bill will cover what bee-keepers need to help them annihilate adulterators and their criminal work.

The Officers for 1893, of the Michigan State Bee-Keepers' Association, elected at the Lansing meeting on Dec. 15th, are as follows:

President, Hon. R. L. Taylor, of Lapeer; Vice-President, J. A. Pearce, of Grand Rapids; Secretary, W. Z. Hutchinson, of Flint; and Treasurer, M. H. Hunt, of Bell Branch.

Prof. Cook reports that they had a "fine meeting;" and Bro. Hutchinson says it "was not very largely attended, but mostly by prominent men, and there was some very interesting discussion."

We expect soon to publish the report.

Portraits of Bee-Keepers. — Beginning with Jan. 1, 1893, we are arranging to publish a biographical sketch with portrait, of some prominent bee-keeper, in *every issue* of the BEE JOURNAL for the ensuing year. This will make it a veritable historical album, besides containing everything of interest relating to the pursuit of bee-keeping. The old AMERICAN BEE JOURNAL for 1893 promises to be more attractive and valuable than ever. Send us your subscription *now*, so that you may be sure to have the very first number of the new year.

The Ladies' Home Journal, of Philadelphia, Pa., is perhaps the finest monthly home magazine in the world. If ordered before Dec. 30th, 1892, we can club it with the BEE JOURNAL—both Journals for one year—for $1.60, to *either old or new subscribers.* If you are a new subscriber to both JOURNALS, you will receive ours the rest of this year *free;* and the "Ladies' Home Journal" will begin with the January number.

The Ohio State Bee-Keepers' Convention was held on Tuesday and Wednesday of this week, as at first announced. We state this, because the notice that it would *not* be changed from Dec. 27th and 28th to Jan. 2nd and 3rd was received too late for insertion last week's BEE JOURNAL.

The Eighth Annual Report of the National Bee-Keepers' Union is now issued, and sent to all the members. Next week we expect to publish a part of it for the benefit our readers who are not already members of the Union.

CONVENTION DIRECTORY.

Time and place of meeting.

1893.

Jan. 10-12.—Ontario, at Walkerton, Ont.
W. Couse, Sec., Streetsville, Ont.

Jan. 13, 14.—S.W. Wisconsin, at Boscobel, Wis.
Edwin Pike, Pres., Boscobel, Wis.

Jan. 12-14.—Minnesota, at Minneapolis, Minn.
A. K. Cooper, Sec., Winona, Minn.

Jan. 16, 17.—Colorado, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.

Jan. 18, 19.—Indiana, at Indianapolis. Ind.
G. P. Wilson, Sec., Tolgate, Ind.

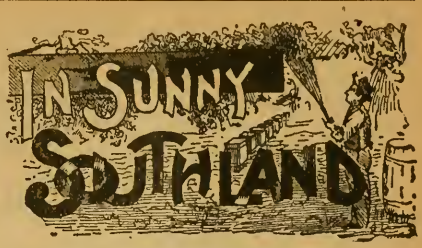
☞ In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor..Forest City, Iowa.
SECRETARY—W. Z. Hutchinson....Flint, Mich

National Bee-Keepers' Union.

PRESIDENT—James Heddon ..Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.



CONDUCTED BY

Mrs. Jennie Atchley,

GREENVILLE, TEXAS.

More About Introducing Queens.

In my directions for introducing queeens to colonies that were hard to get to accept a queen, Henry Alley wishes to know who would take all the trouble to introduce a queen the way I directed. As he wishes me to reply, I will say that it seems to me that he ought to have learned in 30 years, the "nater" of bees. Doesn't he know that to shake or cluster bees, and mix them up and take away their brood, they will take one or more queens, the same as they will when they swarm, and two or more swarms unite. Queens and all will live peaceably together until they are hived, and they go to house-keeping.

Well, if he wishes to take all this pains to introduce, why, it is safe to shake them all out on the ground a time or two, and let them run into the hive together, on combs of honey, or an empty hive, for doesn't he know that bees will fight a queen, workers, or anything else when they have brood to protect? He certainly ought to have learned this. If not, try and see.

Then when the queen is accepted, give them brood. I do not have to do this often, but when I undertake to introduce a queen I introduce her, that's all.

This was given in this department of the BEE JOURNAL, page 365. I only meant to do this way when it was necessary. I don't lose queens in introducing. I have just successfully introduced over 50, all at the same time, without the loss of one, and it has been years since I lost one by introducing. But to successfully do so, we must carefully study the nature of the creature.

Great Premium on page 845!

Bee-Keeping in South Mississippi.

Four years ago I commenced bee-keeping with 2 colonies. I have increased my stock, with some losses, to 25 colonies in good condition for winter. This has been a poor year, in this locality, for bees. The spring had too much rain, and it was too dry in the summer and fall.

Bee-keeping has a perfect fascination for me, and if I never realized any profit from it, more than furnishing my own table with the luxury, it is enough; however, I expect to market some another year. I have taken as much as 100 pounds of nice comb honey from one colony. I am using Langstroth hives, and think them the best. I have read a great deal on bee-culture, and am taking the AMERICAN BEE JOURNAL. I learn something new every day. I have not tried bee-stings for rheumatism yet, but will take Dr. Gress' advice as given on page 729, in regard to that.

JOHN W. KNOX.

Zion Hill, Miss., Dec. 8, 1892.

When Brood-Rearing Shall Begin in the Spring.

Query 851.—How early in the spring do you prefer to have the bees begin rearing brood?—Pa.

April 1st.—R. L. TAYLOR.

In February.—A. B. MASON.

With apple bloom, or earlier.—W. M. BARNUM.

When the natural pollen is existent.—A. J. COOK.

As soon as they come out of the cellar. C. C. MILLER.

I like to see brood coming on by the first of March.—E. FRANCE.

It is best to leave that matter entirely to the bees.—C. H. DIBBERN.

In this latitude, the last of February or first of March.—J. M. HAMBAUGH.

In my latitude, about the last of January or first of February.—J. P. H. BROWN.

I allow the bees to control the matter, and don't care how early they begin.—J. E. POND.

I want brood-rearing to be carried on as rapidly as possible after April 1st.—JAMES A. GREEN.

Never until natural warmth and resources prompt it. Let the bees govern it.—JAMES HEDDON.

Let the bees be the judges of this. Keep them supplied with food, and leave it to them.—DADANT & SON.

Keep your bees strong, if possible. See that they have sufficient stores, and leave the brood-rearing to them.—MRS. L. HARRISON.

I am never consulted. I always find plenty of it when I unpack the hives out-doors, and still more in the cellar.—MRS. J. N. HEATER.

March 15th in this locality, since the colonies that begin that early are the ones to gather in the surplus, if any is to be had.—G. L. TINKER.

In this latitude, I prefer not to have them begin until natural pollen is accessible—about the middle of April, on the average.—EUGENE SECOR.

I leave that to the bees. Keep your bees as comfortable as you can, and see that they have plenty of stores, and they will manage the breeding part.—G. W. DEMAREE.

It depends upon location. With me, I like to have them rearing brood in March. Different races differ. I have had Syrians that had brood the entire year.—H. D. CUTTING.

The time I prefer to have the bees begin rearing brood is about the middle of April, if I could have my say; but, as I cannot, I have to let the bees do about as they are a mind to.—G. M. DOOLITTLE.

I think some of us mistake when we push brood-rearing in the spring. Here in the South, as "springing" is what takes our honey, I think it best to have but little brood until after the turn of March, as our honey harvest seldom comes before May. Unless we wish increase, I think it is honey wasted to push brood-rearing too early. I think we should make our calculations to push brood-rearing just in time to catch the honey-flow with a big, rousing colony.—MRS. JENNIE ATCHLEY.

Report of the Missouri State Bee-Keepers' Convention.

Written for the American Bee Journal

BY P. BALDWIN.

The seventh semi-annual convention of the Missouri State Bee-Keepers' Association met in Independence, Mo., on Nov. 17, 1892, during a severe snow-storm, that made it look somewhat discouraging that anything would be accomplished on the first day of its session, but notwithstanding the severity of the weather, some of the members had weathered the storm and made their appearance at the Hall, looking more as if they had come down from the Northland, than as representatives of the golden bee of Italy.

Owing to the small attendance there was no formal session before dinner. The association was called to order by President G. P. Morton, at 1:30 p.m. The storm having ceased, other members and bee-keepers added their presence and strength to the little nucleus which presently became, although not overflowing, a buzzing, busy colony, ready to gather and store away all the surplus knowledge and experience that bee-keepers are always willing to add to the general stores.

THE PRESIDENT'S ANNUAL ADDRESS.

President Morton's address was verbal, and more on the line of work done than mapping out plans for the future. He stated that he had inquired of quite a number of bee-keepers throughout the State with reference to furnishing an exhibit at the World's Fair, but had not found any one who had any honey of any kind and quality suitable for exhibition. This, he thought, was owing to the failure of the honey crop this season.

He also spoke of his trip to Columbia, Mo., in the interests of the association, with reference to establishing an experimental station at the State University; visiting several persons connected with the institution, who expressed a desire and willingness to do all they could to help the matter, and would endeavor to be represented at the coming meeting of the association.

Several persons at this time paid the admittance fee, and became members.

GRADES OF HONEY BY LAW.

The subjects for discussion on the programme were then taken up, the first being, "Should we have grades of honey established by law?" The general expression was that it would not be practicable, on account of so many different persons grading it, and if there was a law to that effect its execution would be difficult.

The meeting now took the form of questions and answers.

FOUNDATION IN THE SECTIONS.

Mrs. J. M. Null asked, "How many use full sheets of foundation in section boxes?"

L. W. Baldwin—I use a piece 2x3 inches.

Secretary Baldwin—I use sheets 3x3 inches.

A. A. Baldwin—Where you use only starters in the brood-frames, you should use full sheets above.

J. R. Colville—I use nearly full sheets.

Mrs. Null also asked, "What is your experience in using sections that have been on the hive—in using them again, do the bees go to work as readily as with fresh ones?"

A. A. Baldwin—No. I think the fresh sections preferable.

USE OF BEE-HOUSES.

The next on the programme was: "Bee-houses—are they profitable?"

A. A. Baldwin—I suppose the question has reference to house apiaries.

Pres. Morton—I have not had any experience with them.

L. W. Baldwin—It appears that the opinion of bee-keepers is against their use, and had generally been given up, but are being spoken of more, of late.

EDUCATING PEOPLE TO BE APIARISTS.

L. W. Baldwin—Is it a good plan to educate people in the bee-business? My experience is that after I had educated them they would come and put down 100 colonies close up to my apiary.

Mrs. J. M. Null—I have not tried very much. There is a class of people in every community that will get everything they can, and we are not obliged to give it, but will try and be neighborly and answer questions.

A. A. Weaver—I have never taken any special pains to educate them.

APIARIAN EXHIBITS AT CONVENTIONS.

The question was asked, "Is it advisable to have exhibits in connection with the meetings of the bee-associations?"

L. W. Baldwin—I am much in favor of it. I do not know but that as much knowledge can be gained from such an exhibit as from the discussions.

A. A. Weaver—In all the conventions I have been in, whether agricultural, horticultural, or others, the display was the most interesting part of the meeting to everybody; and not only that, but you get more real information out of the meeting itself.

EDUCATING FARMERS ON BEES.

Mrs. Null—In lecturing before the Farmers' Board of Agriculture, what would be the best subject to treat on, to educate the farmers on bees?

Mr. Weaver—There is one point, according to my experience—the most prominent point—educate them and let them alone.

Pres. Morton—I find that horticulturists are willing to be educated on this subject, but it is hard to educate others.

A. A. Baldwin—I think it would be a good plan to get a man, say like Prof. Cook, to write an article to be distributed among the farmers, teaching the benefits of bees in the fertilizing of fruit, as well as to its destruction.

SECOND DAY—MORNING SESSION.

The second day's first session opened with a clear sky, and quite a number additional bee-keepers well loaded with facts and experiences—harbingers of added sweets.

In the absence of the President, Mr. A. A. Weaver occupied the chair. The session was rather informal, being taken up largely with questions and answers.

STORING AND FUMIGATING COMB HONEY.

Mrs. Null asked if there was any one present who had a good method of storing comb honey for keeping?

L. W. Baldwin—I want a dry, warm place, whether in summer or winter, with the temperature at 90°. After comb honey is taken off the hive, in about two weeks it should be fumigated with sulphur to destroy the moth. If it is all taken off the hive at the same time, one fumigation will do, but if taken off at different times, it should be fumigated two or three times.

Mrs. Null—How much sulphur do you use?

Ans.—Five or six pounds to 30,000 or 40,000 pounds of honey.

Ques.—How long do you allow the fumigation to go on?

Ans.—Several hours. I tie my honey in wide frames, and find there is no difficulty in the way of the smoke penetrating it.

Mrs. Null—Would you consider the process of fumigation necessary every year?

Ans.—It would be the safest to do it.

A. A. Baldwin—I did not fumigate it this year. My honey was sold early, and in crating it I did not notice the work of any moth. In the winter months it should be kept from freezing.

HOW MOTHS GET INTO THE HIVES.

L. W. Baldwin—Why is it that after taking our comb honey off the hive, in two or three weeks we find moth appearing? How do the eggs get there?

S. A. Utley—I think the moth lay the eggs in the hive.

A. A. Baldwin—During the working season, when the bees are storing surplus, you do not find many moths in the hive.

L. W. Balwin—I have thought many times whether or not the moths do not lay their eggs on the flowers, and are carried into the hive with the pollen, as the moth hatch from the cells containing pollen.

A. A. Baldwin—The moth-worm cannot fully develop without pollen. When the moth-worm hatches out it feeds on pollen. I am not so sure that they hatch from the pollen, but wherever they do hatch, they go to the pollen to feed.

Mr. Weaver—I have come to the conclusion that there are two distinct variations of moth—one a dark, iron-gray, and the other of lighter color.

OVERSTOCKING AND THE LIGHT CROP.

The question was asked, "Is it the opinion of the association that overstocking had anything to do with our light crop this season?"

L. W. Baldwin—I can hardly say that my locality has been overstocked. I have generally kept large apiaries, usually 150 colonies in one apiary. It will pay me better than to have a less number, and hire more men. I cannot say but that I get as good an average as those around me who have only a few colonies.

Mr. Weaver—Generally speaking, those

that keep the most bees get the most honey per colony. I do not think my field is overstocked.

J. H. Jones—We never mention the cause of the failure of the honey season in this part of the country, which was, I think, on account of the heavy rains, immediately followed by dry weather. I do not think my field is overstocked, and I keep 150 colonies in an apiary.

A. A. Baldwin—I think there are certain seasons of the year when the field could be overstocked, but in the main honey-flow it is almost impossible to overstock the field.

HOW FAR DO BEES FLY FOR HONEY?

Mrs. Null asked, "In your opinion what distance do bees usually fly in search of honey?"

A. A. Baldwin—That depends upon the lay of the land. On the prairie, two or three miles; if in the timber, it may be 1½ miles. I think two miles about the range of bees in quest of honey. In hunting bees I have lined them three miles, but that was in a scarcity of honey.

R. W. Knox—My experience is similar to Mr. Baldwin's. My impressions are, from observation, that one to 1½ miles is their flight; that they do not get outside of two miles.

Mrs. Null—If the honey-producing plants were 1½ and beyond to three miles, would the distance make any material difference in the honey crops?

L. W. Baldwin—Yes, to a considerable extent, although in 1868, in the time of white clover, I was three miles from home, and noticed Italian bees on the clover, mine being the only ones in that section of country.

Secretary Baldwin—I should not look for much of a honey crop if the beginning of the honey-producing plants were 1½ miles from my apiary.

J. H. Jones—Just after the clover season I moved from my apiary 50 colonies three miles from home, and only about a quart of bees returned. My home apiary is two miles from basswood, and when it yields abundantly I get basswood honey, but from the apiary located right among the basswood, I get basswood honey every year.

S. A. Utley—I would say that apiaries should be three miles apart; still I hardly think that bees go two miles. I should think that 1½ miles would cover their flight.

AFTERNOON SESSION.

The convention met again at 1:30 p.m. After the Treasurer's report and election of officers, the programme was taken up with this subject:

PROFITABLE APIARIES DURING A DROUTH.

"How to make an apiary profitable during a drouth."

L. W. Baldwin—It would have been better to have said "the best management during a dry season." I have not seen a season in 25 years when I could get a crop of honey in a drouth.

J. H. Jones—In a dry season that I remember, I secured a large crop of honey.

Secretary Baldwin—In a severe drouth the colony does not get sufficient honey and pollen to keep up breeding, and should be stimulated by feeding to keep up its strength.

MOST RELIABLE HONEY-PLANTS.

Ques.—"Which are our most reliable honey-plants?"

Mr. Weaver—About all the honey I get is from white clover and Spanish-needle.

Mrs. Null—Our surplus is from white clover, basswood, Spanish-needle and heart's-ease. For breeding purposes, fruit-bloom is good, if the weather is so that the bees can get out. Also locust yields some honey.

Mr. Weaver—There is located in range of my apiary several large orchards, and last year, if the colonies were strong, they worked on the bloom to some extent.

G. P. Morton—Through the central part of the State the white clover is first in importance. If we had linden it would be equally as good a source as the white clover. In the fall we have Spanish-needle, heart's-ease, etc.

A. A. Bladwin—This year buck-bush yielded honey sufficiently to keep the colonies storing a little, and if there was enough of it, it would be a good plant for surplus.

Mrs. Milton Cone—One year our crop was entirely from Spanish-needle, but the next year it yielded nothing.

EVENING SESSION.

The evening session was called to order at 7 o'clock.

MAKING EXHIBITS AT MEETINGS.

The first question discussed was "The advisability of making exhibits at our meetings, and devoting the night sessions to them."

J. H. Jones—I am in favor of making exhibits.

A. A. Baldwin—I think one object of exhibits is to educate the people. When they have looked them over, they spread abroad their knowledge of them.

G. P. Morton—We have been running this association for three years, and it is very hard to keep up the interest, and I am willing to engraft such exhibition on the work, and see if we cannot create a greater interest among bee-keepers.

L. W. Baldwin—I am much in favor of it; but how can we get the money to carry it on with? If each member would do a little, it would amount to quite a sum.

It was decided to make such an exhibit of anything connected with the business.

THIRD DAY—Morning Session.

The third day's first session convened at 9 a.m. After the reception of several members, the deferred work was taken up on the

WORLD'S FAIR EXHIBIT.

C. L. Buckmaster asked if the State Board of Commissioners were disposed to do anything for the bee-keepers?

G. P. Morton stated that the Board said substantially that all we can do for you is this: You collect your goods and ship them to Chicago, and we will pay the shipping expenses, and will provide space and cases for them to occupy; but will not guarantee that we can give you a superintendent there, neither can we issue a warrant for any sum of money, and let your Treasurer dispose of it.

Some of the members were disposed to drop the matter.

L. W. Baldwin—I do not think it would be well to drop it so suddenly. I think we had better wait and try to get the State to help us. I do not see how we can get it in any shape at this meeting, as it would be impossible to get any honey this year for an exhibit. If we had $500 or a $1,000, and could appoint a committee to take charge of it, we might make something out of it.

A motion was carried, that the procuring and arrangement of the exhibit be left in the hands of the Executive Committee.

APICULTURAL EXPERIMENT STATION.

The subject of establishing an experimental station at the State University was laid before the meeting, and Mr. Buckmaster, representing the interests of the University, read an essay on the subject. [This essay will appear later. —Ed.]

A discussion of the question was brought to a close by a resolution introduced by Mrs. Null, "That it is the sense of this association that we receive recognition for apiculture at the experiment station, and that a committee of two be appointed to meet with the curators of the University at their next meeting, and present the subject."

The Secretary stated that Mr. Thomas V. Cornell, a visiting bee-keeper of Center Point, Iowa, was present, and moved that he be made an honorary member of the association, which was agreed to.

AFTERNOON SESSION.

The convention met at 1:30 o'clock.

The statistics taken at the meeting were as follows:

TABLE OF STATISTICS.

Names.	Spring No. Cols.	Fall No. Cols.	Comb Hon. No. Lbs.	Ext. Hon. No. Lbs.	Wax. No. Lbs.
L. W. Baldwin & Son	765	820	12,000	2,000	100
Null & Anderson	500	650	1,500	6,000	100
J. E. Jones	120	150	1,600	150	100
S. A. Utley	83	100	1,200	200	25
Jas. H. Jones	250	300	3,500	1,000	200
G. P. Morton	20	31	100	600	10
J. R. Chiles	37	55	200	120	25
J. H. Hock	53	64	400	120	25
P. Baldwin	135	150	2,500	———	50
Total	1,963	2,320	23,000	11,000	635

The committee on resolutions was called on, and reported the following:

Resolved, That we extend our sympathy to Bro. Quigley, of the *Progressive Bee-Keeper*, in his recent loss by fire.

Resolved, That this association cannot in any way approve of the practice of feeding sugar syrup to bees for the purpose of obtaining surplus, and placing the same on the market as pure honey.

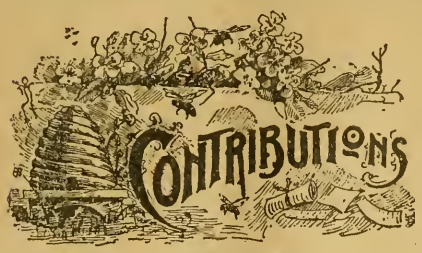
Resloved, That the thanks of the association be extended to C. C. Clemons for his kindness in having the progamme of the meeting printed, and sending them to the members.

Owing to the absurd, and it might be said laughable reports of our meetings by the press, a motion prevailed that an Assistant Secretary be appointed at the commencement of each meeting, whose duty shall be to prepare a report of each session for the press.

The remainder of the afternoon was spent, as is usually the case, in an off-hand interchange of ideas relative to apiculture.

On account of a misunderstanding in advertising the time of the meeting, the attendance was not large, yet it was evident that those who had taken the time and means to meet with us, returned to their homes satisfied that, all things considered, the meeting was interesting and profitable.

The association thought best, by changing the Constitution, to hold only one meeting a year instead of two, as heretofore; the next meeting to be held in the fall of 1893, at Pyrtel Springs, Mo. P. BALDWIN, *Sec.*



"Italians vs. Native Bees"—Clipping Queens' Wings.

Written for the American Bee Journal

BY S. E. MILLER.

Every little while some fellow pops up and sings the praises of the blacks, or as some choose to call them the "native bees," and I might say I cannot see why the blacks are any more native than the Italians, as both were orignally brought to America.

This time it is Mr. C. J. Robinson (see page 698)—a man of more than half a century's experience, and in all that time he has not been able to see the superior qualities of the Italians. Why, it takes the average bee-keeper of this age less than a year to see the difference, and discard the blacks. I have no objections to any one preferring the blacks, but why preach that they are superior to the Italians, or even equal, when the great majority are on the side of the Itatlians?

May I ask Mr. Robinson, why, if the blacks are equal to the Italians, will bee-keepers pay all the way from 70 cents to $10, and even more, for Italian queens, while they can get black queens for the asking, or at the most a very small consideration? Mr. R. may say it is only a notion, or a mania, that people have for Italian bees that causes them to purchase queens at high prices; but to this I would say I hardly think the average bee-keeper would sacrifice dollars and cents, merely for the sake of fashion!

Again, why have the so-called superior strains of black bees, that have been advertised in the various bee-papers, all gone to the wall? Are not the so-called black bees often in reality hybrids? We have a few colonies that some might call blacks, but they are in reality hybrids, and are, as a rule, good workers; but when it comes to the Simon-pure blacks, I want 'tother fellow to keep them.

Why don't some fellow claim that the hazel-splitter that runs wild in the woods eleven months in the year, is fed corn sparingly for one month, and then slaughtered, is as good as the improved strains of swine—such as Poland China, Berkshire, etc.? For the farmer who allows his hogs to roam in the woods most of the time, no doubt the former race is the one best suited to his needs, as they will stand more exposure and neglect. The same with horses, cattle and poultry. Who'll be the next to bring black bees to the front?

CLIPPING THE WINGS OF QUEENS.

"Malta" asks (page 698): "Is it advisable as regards economy of labor and anxiety on the part of the bee-keeper?"

I should say it is! M.'s apprehensions that the swarm will become scattered when they find the queen is not with them, do not realize in fact; and if the queen is caged while the swarm is out, the old hive removed and a new hive put in its place, and the queen allowed to run in with the swarm when they return, I know of no way of swarming or hiving that takes less time and labor, and I have never noticed that swarms

thus hived did not work as well as those hived by any other plan.

So far as the prevention of swarming is concerned, I see no difference between a clipped queen and one with wings, and did not think that any one advocated clipping for the prevention of swarming. It simply prevents the swarm from flying away, provided the apiarist is not present.

In regard to the practice eventually resulting in the deformity of the wings of queens or workers, I would say that the practice of purchasing queens frequently for improving one's strain of bees, will overcome this imaginary evil, as none of the queen-breeders send out clipped queens, and this is of itself a safe-guard against the probability of such a misfortune.

The bee-keeper who will not instill new blood into his apiary by purchasing a select breeding queen from some reliable breeder occasionally, ought to have a deformed strain of bees.

Bluffton, Mo.

Wong Lung's Honey-Flies, or a Celestial Apiarist's "Ups and Downs" in Bee-Culture.

Written for the American Bee Journal

BY WONG LUNG.

Mister Newsplaper-Man : — Me long time thinkee send you of my sugar-flies —Melican man call him "bee," eh ?

Well, in flirst place, you sabbe I come from China where I was born, and work in lice fields, and thlee year washee clothes in Slan Flanclisco. Bimeby we laise legitables close by near Oakland. One day heep lot sugar-fly come my house, and go in tea-box. My plartner, Jim, he no likee—too muchee bite. I likee sugar-fly heep muchee—him sugar-fly belly nice, heep sweet.

I fixee tea-box in sun and watchee honey-fly go and come. Thlee week him heep fly out—me thinkee allee my sugar-fly go away. What for ? Me no sabbe. Me belly good to him. No hurtee him.

Melican man come and he say, "Lung, your bees swarm belly good. Bimeby you heep big bee-man ; all same one mandarin. You catch box when bee go on tlee, and put him in box, and you have two swarms."

So me heep glad. Me get belly rich. Plenty sugar-fly—heep sugar—muchee money ! Allee samee me go back blimeby to China, heep big man. Me all-a-samee big Mogul—me thlink you call him "big-bug "—heep "swell."

Sugar-fly catchee on chelly tlee and all quiet. I takee tea-box and call my plartner—him samee Jim. I say, "Jim, you hold box, so." I show him—hold him over his head so that sugar-fly fall into him box when I shakee tlee.

Jim, he belly good man. He my wife's cousin—my wife in China. Jim hold box way up high. Pletty soon I shake tlee and honey-fly fall down—whew ! him go more on Jim than in blox. Jim he jump heep high, and yell—yes, he yell like h—l, all samee Melican man say, you sabbe. That man he lun, and honey-fly get on horsee. Horsee klick likee blazes, and tear allee over glarden. Lose too muchee money—onion allee spoiled. Cabbage bloke down. Garlic trampee on—belly bad, belly bad muss. Horsee muchee scared.

Melican man catchee horsee. Me give him four bittee. Jim come back and me say, "Jim, you heep no good, let blox fall. Horsee lun way and bloke too muchee glarden sass."

Jim, he say, "Me no care. Sugar-fly heep bite. Him sting me evlywhere."

All-a-samee me get sugar-fly in blox and have two blox flies.

Two more months me tell Jim me likee sugar. Jim say, "All light, you catchee him."

Me say, no sabbe muchee. Me tly to-morrow.

To-morrow one Ilishman come long—him Ilishman own heep land. Him too smart. He say, "John, what you do to your bees ?"

Me no likee Ilishman, and me say, "None your blizness." But Ilishman no go way. He laughee me, and he say, "John, you bee bite heep muchee. You no sabbe fix him. You like me show you ?"

Me say, "All lite."

So, Mr. Mulphley take blox into my bedroom (he say Dr. Piller—one big honey-fly man—talkee allee samee belly good place to fix bee, cause makee bed heep warm).

Well, Mr. Mulphley blake bloard off blox and heep fly come out and bluzz evlywhere. Him get into me shoes and up my—what you call him—pants ? Him also get heep into bed. Mr. Mulphley take four or five pieces of sugar and put on pan ; then fix blox allee lite and put him outside, near the other blox.

Mr. Mulphley belly good. Me give him lot onions and one block, me thinkee come flom Mr. Loot, about chewing tobacco.

Pletty soon Mr. Mulphley go way, and me takee sugar and eat him, tlee, four pounds. Too muchee sugar no good! Blime by me sick—sick stomachee.

Jim come home, find me on floor, hap die. He heep scared. He catchee gin and give me.

Me say, "No, Jim; me hap die flirst. Me no more dlinkee whiskey. Mr. Loot (him belly good man) he say "whiskey belly bad for man's belly. Mr. Loot heep sabbe."

Jim say, "Wha' for you care Mr. Loot and Dr. Piller. They heep sabbe laise bee, but no sabbe you belly. Me no want you hap die. Me like you to-mollow plow corn. So you dlink gin!"

I close me eyes, open my mouth, and say, "Here's to your health, Mr. Loot. Me heep likee get well quickee."

You bet me get well quickee. Mr. Mulphley say I catchee colickee—eat heep sugar.

Night come, Jim he go bed flirst. Sloon me thlinkee him clazy. Me go bed, too. Soon me thlinkee me in Melican man's hot place. Me get bite in feet, in arms, on head—heep lot evlywhere. Jim, he just clazy—him sugar-fly in bed bitee him likee—what you say for belly good cussword? No sleep this night. Jim he say he no more stay with me if me keep sugar-fly.

Me tell him "All lite," me no care; me likee sugar-fly allee samee him my child. Me keep him, and one, two year me have heep lot."

Jim go way next day, and me lun lanch allee samee Lambler—keep batch-'lor's hall and heep bee.

Sunday me no work on lanch, so me go Slunday-school, and talk teacher 'bout sugar-fly. Him teacher one lady, and say he leed Mr. Loot's "A B C Book on Sugar-Fly." Me likee hear him teachee, talk heep lot. Him tell me 'bout God, but me forget; him takee 'bout sugar-fly, me no forget.

Me go home and fix my bee for winter quarters—me think that's what Mr. Loot call him. Mr. Mulphley say Mr. Loot no sabbe—California heep warm—fly no hap die. Mr. Loot lite, Mr. Mulphley lite. How me know? Me flix fly likee this: Mr. Loot long, and me flix him allee samee he say my sugar-fly die; Mr. Mulphley long, and me follow him, fly die too. So me flix him one blox likee Mr. Mulphley say. You sabbe?

Winter go way me look at sugar-fly. One hap die—him allee samee flixed like Mr. Loot say; the other belly fine—him heep stlong, and sting me one eye—me one eye—me no care muchee, but heep glad him live.

Next time me tell you what me do next year.

What you thlinkee me as a sugar-fly-keeper? You likee hear flom me—me give you lot news. Me likee to hear 'bout Dr. Piller, Mr. Doonothing, Mr. Loot, Plofessor Clook, Mr. Gleen, Dr. Tlinker, and Hutchlinslon, Slecor, Heddlon, Dlibbern, Flance, Lallabee, Dlemalee, and other big sugar-fly writers. Me hopee they will be glad to hear flom me, and enjoy me explerience as I enjoy theirs. WONG LUNG.

Slan Flanclisco, Claliflornia.

S. P.—*Mr. Newsplaper-Man:* — Me hopee you will excluse me glammar—as me only plicked it up in Slunday-school where me also learned to lead and write. If me makee successee of the blizness here, me shall start a Chinese sugar-fly journal in Canton, slometime.

W. L.

Results of the Season—Deceived on Winter Stores.

Written for the American Bee Journal

BY JOSEPH DUNBARR.

My colonies of bees have cast but few swarms, not averaging over one-fourth their number each year, but they have increased from year to year until last fall, at which time I had 45 colonies. Two were Italians and one Carniolan, and if there is any I could not see the variation from the black bee. About one-half were hybrids, the rest blacks.

The honey was above the average in quality last year, according to the general report. They gave me between 1,500 and 2,000 lbs. of surplus, but it was all dark except what was gathered from smart-weed, and it was mixed with the honey-dew. As dark as it was, many of my customers admired its taste. I sold all but 50 pounds, which I have yet.

I will now tell how I lost 35 colonies, and if any wish a similar experience, they can follow my example.

After the fall flow of nectar last year (1891), I took the upper set of frames out of the upper stories (my hives are the Simplicity pattern). As I emptied each story, and decided from the appearance the amount left as to its being sufficient to winter on, I rested easy until a few days before the first cold spell. I commenced placing warm covers

over the brood-frames, and found out the eye could deceive the judgment.

The lower frames, the top of which was filled with honey and capped over, had all been consumed, and the bees literally destitute. I bought some sugar, procured quart fruit-cans, made syrup, and filled the cans and placed them over the brood-frames. Cold weather soon set in, and but little of the surplus were taken. Bees were in a starving condition, that is, some of the colonies. I then made taffy and gave that to some of them; this proved a failure. Then I punched holes with an awl in the bottom of the cans, filled them, and placed them over the brood-frames again, which proved a success, and drowned the bees by the wholesale.

I lost colony after colony, until I had only 10 left—2 Italians, one Carniolan (or said to be), 3 blacks, and 4 hybrids. These have averaged 50 pounds of surplus honey per colony. They increased to 15 colonies, and are all in good condition. Each hive is very heavy this fall—I judged from weight instead of sight. My loss has been quite an item. Experience teaches a dear school, but fools will learn there.

Brown Co., Ills.

Opportunities in Apiculture—Wheat and Honey.

Written for the American Bee Journal

BY A. O. CALHOUN.

I have 60 colonies of bees in good condition for the winter, on the summer stands. The honey crop here was a failure this year. I could sell hundreds of pounds more, here at home, than I will have to spare. I have been handling bees for about six years, and like the business.

What a grand opportunity is afforded in the field of apiculture, for obeying the first command of God to the human family, namely, multiply, replenish and subdue the earth; or, that we may grasp the thought more readily, we will take it in its natural order. Subdue and replenish the earth, that the fruits thereof may be multiplied to the human family. Now, it is indisputable that in proportion as man has obeyed this command, he has enjoyed the necessities, comforts and luxuries of life.

There is possibly the necessities of life in the wild grains, fruits and vegetables of earth, but where man has subdued these and replenished or replaced them with better grades (and these are to be had by a little thoughtful care and culture), the fruits thereof have been multiplied, and comforts are his that the heathen are strangers to. To such an extent is this command being obeyed in this our day, that we are enjoying even the luxuries of life.

God has promised that if we are obedient we shall eat the "finest of the wheat;" not only the finest wheat, but the *finest* of *the wheat*, and we see this promise fulfilled in the fact that we no longer eat for bread a mixture of brand, midlings, germs, and the walls or cells of the grain in which the flour, like honey in the comb, is stowed away; but under the present system of making flour, all is eliminated except the finest of the wheat.

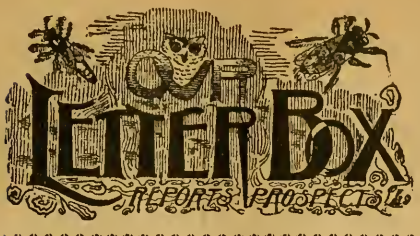
Observation will show that a grain of wheat and a hive with bees are much alike in many respects. In the one we have the bran around the grain; in the other we have the hive. A grain of wheat is divided into cells; likewise we have the honey-comb, and as we find the germ, midlings and finest of the flour stored away in the cells of a grain of wheat, even so we find the brood, bee-bread, poor honey, and the finest of the honey in the cells of the honey-comb.

How grateful I am that the promise holds good not only in the case of wheat, but in apiculture also; hence, we are eating the finest of the honey out of pound sections, no longer being satisfied with a mixture of rotten gums, brood, bee-bread, old combs and honey taken from the sanctuary of the floral priesthood, according to the process taught us by Bruin; thanks be to God, christianity, education, and such men as our beloved Father Langstroth!

Victor, Mo., Nov. 17, 1892.

The World's Fair Women

"Souvenir" is the daintiest and prettiest book issued in connection with the World's Fair. It is by Josephine D. Hill—a noted society lady of the West—and contains superb full-page portraits and sketches of 31 of the World's Fair women and wives of prominent officials connected with the great Fair. It is printed on enameled paper, with half-tone engravings, bound in leatherette. We will send it postpaid for $1.00, or give it for *two* new subscribers to the BEE JOURNAL for a year, at $1.00 each. Every woman will want a copy of this book, we feel sure.



☞ Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Honey of Fine Quality, Etc.

I have 22 colonies of bees in eight and ten frames, plain Simplicity hives. I did not get a big crop this year, but it was of very fine quality of comb honey. I work for comb honey alone. I have given particular attention to my bees for two years, although I have had a few bees for 18 or 20 years, and I have found a great many bee-trees in past years. I have learned a great amount from the AMERICAN BEE JOURNAL in the last 12 months. J. E. ENYART.

McFalls, Mo., Dec. 17, 1892.

Feeding Sugar Syrup.

On page 796, Mr. Reeves, of Carmi, Ills., in speaking of honey from sugar syrup, says: "It was simply syrup without the taste of honey to it." I was sorry to see that, for though possibly in part true, it was misleading. In case an inferior article of sugar is fed, the flavor of the sugar kills the honey-flavor, and the honey would be called "sugar syrup;" but if pure cane-sugar was used, then the honey would not be even thought of as syrup, but as honey. I took some such honey to the recent Lansing convention of the Michigan State Bee-Keepers' Association, and two of the best apiarists and judges of honey in the country pronounced it honey, and of excellent reputation.

I say fearlessly, and positively, that honey from pure cane-sugar syrup cannot be told from honey. The bees change it, and add so many of the leading characteristics of all other honey, that no one will think it is aught but honey. See my article on this subject to appear in *Gleanings* for Jan. 1, 1893.

A. J. COOK.

Agricultural College, Mich.

[As the matter of feeding sugar syrup for the production of so-called "sugar-honey" has been pretty thoroughly ventilated in both the *Review* and *Gleanings* recently, it is hardly worth while to go over the same ground in the BEE JOURNAL, especially as there are now so many other topics of greater importance to bee-keepers that should receive attention. Nearly all agree that even if it might prove profitable to thus feed sugar, it would almost certainly be too dangerous and risky a thing to do for the good of the pursuit of bee-keeping. There is no need of trying to walk safely over quicksands, when we *know* there is a pathway where safety is unquestioned.

Two of the more important questions just now "before the house" are, "Adulteration of Honey" and "Government Aid to Apiculture." Others could be named, but Prof. Cook has said that these two are *the* questions, so let us devote our thought and efforts to them. See editorial on page 849.—ED.]

Report for the Season of 1892.

I commenced the season of 1892 with 38 good, strong colonies of bees, and secured 150 pounds of comb honey and 100 pounds of extracted. I had about 20 swarms, but doubled back and did not increase any. I enter the winter of 1892-93 with 34 good, strong colonies, having doubled up to that number; all with natural stores enough, I think, to carry them to April.

The little honey I did get was principally from pea-vine clover, and basswood. The fall bloom was immense, but no honey in it. The weather was everything that could be desired, but all to no purpose so far as bee-keeping was concerned.

I read the BEE JOURNAL each week, and derive a great deal of information and pleasure out of it. I wish it and its editor a long and prosperous life.

L. G. REED.

Kent, O., Dec. 19, 1892.

Value of Apiarian Knowledge.

I certainly cannot do without the AMERICAN BEE JOURNAL, as I found out by sad experience that no one can keep bees, and make it pay, without first having a thorough knowledge of the business.

I commenced keeping bees away back in the '60's. I invested $100 in the business to start with; and right here let me say that I think it is a mistake in putting so much money into the business until we have some experience in the business. I had no knowledge of bee-keeping, either from books or experience. What was the result? I lost every bee the next winter after purchasing them. This "wound up" the bee-business with me until five years ago, when I became interested in it again. I began this time with one colony, and invested the value of another one in bee books and papers. I was, and am, determined to win this time.

As a result, I have made it pay reasonably well, although we have had a succession of poor seasons. Last season was called the poorest one ever known here, and yet from 20 colonies, spring count, I sold $73 worth of comb honey, and yet other bee-keepers that had three times as many bees as I had, did not get any honey. They let their bees take their own course; I profited by what I had read and learned. I read with interest every page of the valuable AMERICAN BEE JOURNAL as it comes weekly, and shall continue to do so as long as I keep bees. J. F. MERRILL.

Corinth, Vt., Dec. 10, 1892.

Some Interesting Suggestions.

Query 846, page 694, I think needs at least one more suggestion as to how the bee-papers may be improved. For years I have been waiting for some one who understands the business, to be engaged to "review" each number, and the comments published in the next issue, if possible. At one time I expected Dr. Miller would do this when he started "Stray Straws," but it has not fully satisfied me yet. As the *Review* has truly said, some people can tell more than they know, and others cannot tell as much as they know. I am one of the latter, but I will "review" a little of the AMERICAN BEE JOURNAL for Dec. 1st, so you will know what I am asking for some one to do. For instance:

Page 719 says the first snow was on Nov. 25, in Chicago. First snow here, Oct. 3rd; four inches; good sleighing now. I would like to be at the North American Convention, but cannot.

Page 720—Dark blue wax is mentioned. Tell Dadants not to make any foundation out of it.

Page 721—I cannot understand Prof. A. J. Cook, but presume he means the sample was honey-dew with sugar syrup and other stuff added.

"California Bee-Keeping" — About half way down the column says, "An industry which yields $375,000 per annum without any outlay." Now I say this is very misleading to beginners, or others that have not begun. Then at the end it should be said, "Put the label over the cover of each jar, so that it could not be opened without breaking the label, because if not so placed, they could be emptied and refilled with a mixture."

Page 723—The Michigan Bee-Keepers' Association has prepared good subjects for discussion, which I will watch for. J. R. BELLAMY.

Black Bank, Ont.

[Well done, friend B. Your suggestions are good, and no doubt will be taken advantage of as soon as possible. You might do some of it yourself, if you wish, as you have shown very clearly that you can if you try. We are always glad to receive suggestions, looking toward the improvement of the BEE JOURNAL, but we may not in every case deem the suggestions good ones, or be able to carry them out.—ED.]

Only Person that Took Any Honey.

I have devoted the past year to bee-keeping. At first I had box-hives and black bees, and did not succeed at all. I then secured the eight-frame dovetailed hives, and also the Italian bees. I have 15 colonies, all doing nicely. Mine are the only Italian bees in the neighborhood, consequently I am the only person that took honey this season.

I fed them about 200 pounds of sugar syrup. I have no bee-house, nor have I ever put them into the cellar. I made small houses of weather-boarding, about 6 inches larger than the hives, all around, and made the tops separately, and filled the space between the hive and house with straw; I like the plan, and think it will work finely. The weather is never very severe here, anyway.

Carrie Aaron's way of bee-keeping, as described on page 688, is quite novel. Success to her. I enjoy reading the BEE JOURNAL very much.

JAKE EVERMAN.

North Middleton, Ky., Dec. 15, 1892.

"Bees and Honey"—page 845.

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Convention Notices.

INDIANA.—The Indiana State Bee-Keepers' Association meet at Indianapolis, Ind., on Jan. 18 and 19, 1893. G. P. WILSON, Sec.
Tolgate, Ind.

ONTARIO, CAN.—The annual meeting of the Ontario Bee-Keepers' Association will be held in Walkerton, Ont., on Jan. 10, 11 and 12th, 1893. All interested in bee-keeping are cordially invited to be present.
Streetsville, Ont. W. COUSE, Sec.

COLORADO.—The Colo. State Bee-Keepers' Association will hold their annual meeting in Denver, on Jan. 16 and 17, 1893. Election of officers and other important business will come before the meeting.
Littleton, Colo. H. KNIGHT, Sec.

MINNESOTA—.The annual meeting of the Minnesota Bee-Keepers' Association will be held at Minneapolis, on Thursday, Friday and Saturday, Jan. 12, 13 and 14, 1893. The Thursday meeting will probably be a union meeting with the Horticultural Society which meets at the same place, commencing on Tuesday. A. K. COOPER, Sec.
Winona, Minn.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will hold its next annual meeting as Boscobel, Grant Co., Wis., on Jan. 13 and 14, 1893. All members of the Association are requested to be present as the following officers are to be elected: President, Vice-President, Secretary, Assistant Sec., and Treasurer. Blank Reports will be sent each member, for the year 1892, with instructions. A cordial invitation is extended to all bee-keepers, and especially to those that would like to join with us. Each member will be notified at least one month before the meeting.
Boscobel, Wis. EDWIN PIKE, Pres.

Honey & Beeswax Market Quotations.

The following Quotations are for Saturday, December 24th, 1892 :

CHICAGO, ILL.—Demand for comb honey is quite good, and choice lots bring 18c., others in proportion. Extracted, 6@9c,, according to what it is—sales chiefly at 8@9c.
Beeswax—23@25c. R. A. B.

CHICAGO, ILLS.—Considerable honey coming in. Fancy stock for Holidays will bring fancy price. White comb now selling 16@17 cts., with dull market owing to mild weather. Extracted holds firm 8@9c. for fancy; 7c. for dark.
Beeswax—23@25c. J. A. L.

KANSAS CITY, MO.—Receipts and stocks very light, demand good. We quote: No. 1 white 1-lbs. 16@17c.; No. 2, 14@15c.; No. 1 amber 1-lbs. 15c.; No. 2 amber, 10@12c. Extracted, white, 7@7½c.; amber, 5@6.
Beeswax—20@23c. C.-M. C. C.

CINCINNATI, OHIO.—Demand is good for honey, with scant supply of all kinds. Extracted brings 6@8c., and comb sells at 14@16c. for best white. Although honey is scarce, there is no demand for dark comb.
Beeswax—Demand good, at 20@25c. for good to choice yellow. Supply good. C. F. M. & S.

SAN FRANCISCO, CALIF.—Choice extracted is scarce at 7@7½c., and demand heavier than supply. Choice comb is not scarce at 10@12c., according to quality, 1-lbs. Beeswax is neglected at 22@23c. S., L. & S.

BOSTON, MASS.—Comb honey is selling slow, very much slower than we like to have it, and it is our experience that when we start honey in at a high price, it sells hard right through the season. We quote our market nominally at 17@18c. for best white honey, 1-lb. combs. Extracted, 8@9c.
Beeswax—None on hand. B. & R.

KANSAS CITY, MO.—Demand good, supply very light. White 1-lbs., 16c. Extracted, 6@7c. New crop is arriving and is very fine. No Beeswax on the market. H. & B.

MINNEAPOLIS, MINN.—Market good and new crop is arriving, but mostly dark is being marketed. Fancy white clover 1-lbs. sell fast at 18c.; 2-lbs. 16@17c. Buckwheat, comb, 13@14c. Extracted, in barrels, 7@8c.; in 5 or 10 lb. kegs., 9@10c. J. A. S. & C.

MINNEAPOLIS, MINN.—No. 1 white 1-lbs., 18c.; No. 2, 16@17c. No. 1 dark 1-lbs., 13@14 cts.; No. 2, 12½c. Old honey 2c. to 3c. per lb. lower. New extracted (not candied), white, 8@9c.; dark, 6@7c. Old extracted (candied) slow sale at 2 to 3c. lower per lb. S. & E.

NEW YORK. N. Y.—Our market is quiet. Arrivals are freely, and the demand limited. We quote: Fancy white, 1-lbs., 15@16c.; 2-lbs., 12@13c. Fair white, 1-lbs., 12@13c.; 2-lbs., 11c. There are large stocks of buckwheat honey on our market, and we know of two lots of fancy 1-lbs. that sold at 8 and 9c. per lb., respectvely. We quote 1-lbs., glassed or in paper-boxes, 10c.; unglassed, 9c. Extracted is in good demand at 8@8½c. for basswood and white clover; 6@6½c. for buckwheat; 70@75c. per gallon for Southern.
Beeswax—Dull at 25@27c. H. B. & S.

ALBANY, N. Y.—Honey market some quieter and prices some easier. White clover, 15@17c.: mixed, 14@15c.; dark, 10@11c. Extracted, white, 8@8½c.: mixed, 7@7½c.; dark 7c. Stocks light of both comb and extracted.
Beeswax, 27@28c. H. R. W.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

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J. A. LAMON. 44 & 46 South Water Street

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HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.

San Francisco, Calif.
SCHACHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.
STEWART & ELLIOTT, 22 Bridge Square.
J. A. SHEA & Co., 14 & 16 Hennepin Avenue.

Kansas City, Mo.
HAMBLIN & BEARSS, 514 Walnut Street.
CLEMONS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.
H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.
CHAS. DADANT & SON.

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C. F. MUTH & SON, cor. Freeman & Central avs.

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